



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 126367

TO: Alton Pryor

Location: REM 4639

Art Unit: 1616

July 1, 2004

Case Serial Number: 10/617501

From: P. Sheppard

Location: Remsen Building

Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes

Sulfur
diketon

=> fil hcaplus
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FILE COVERS 1907 - 1 Jul 2004 VOL 141 ISS 1
 FILE LAST UPDATED: 30 Jun 2004 (20040630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?
 L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI
 L3 SEL PLU=ON L1 1- CHEM : 210 TERMS
 L4 37613 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L5 54254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR ?DIKETONE?
 L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
 L7 1818 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L5
 L9 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?ANESTHE? OR ?HISTAMIN
 E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
 ?OINTMENT? OR URGENT? OR ?ITCH?)
 L10 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT (FLAVOR? OR CREAM(W) BUT
 TER OR FOOD#)

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L10 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:550896 HCAPLUS
 DOCUMENT NUMBER: 137:267469
 TITLE: Populations at risk
 AUTHOR(S): Pedersen, David H.; Young, Randy O.; Rose, Vernon E.
 CORPORATE SOURCE: National Institute for Occupational Safety and Health,
 Cincinnati, OH, USA
 SOURCE: Patty's Toxicology (5th Edition) (2001), Volume 8,
 699-1080. Editor(s): Bingham, Eula; Cohrssen,
 Barbara; Powell, Charles H. John Wiley & Sons, Inc.:
 New York, N. Y.
 CODEN: 69CWST; ISBN: 0-471-31943-0
 DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB The recognition and anticipation of potential occupational health
 problems, followed by assessment of occupational health risks based on

chemical, phys., or biol. properties of toxic agents and their potential contact or exposure under use conditions, in the practice of industrial hygiene and toxicol. for worker populations at risk is discussed. Topics covered include: background (Industrial Classification, Occupational Classification Codes, Chemical Master, Facilities, Exposure, and Trade Named Ingredients files); data source considerations; data display considerations; calcn. and display of ests. (industry-specific exposure concentration by facility employment size, industry-specific exposure concns., all industries exposure concentration by facility employment size, summary estimate). An appendix displays information on the industrial distribution potential occupational exposures to >300 selected chemical agents or groups of agents in 290 tables.

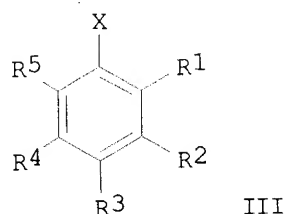
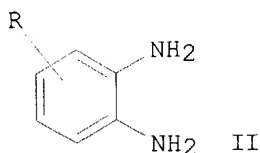
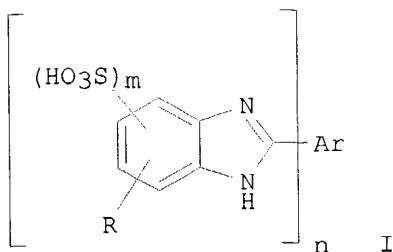
IT 123-42-2, 4-Hydroxy-4-methyl
-2-pentanone 2551-62-4, Sulfur
hexafluoride 7446-09-5, Sulfur dioxide, biological
studies 7783-06-4, Hydrogen sulfide, biological studies
10025-67-9, Sulfur chloride
RL: ADV (Adverse effect, including toxicity); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(industry-specific workplace populations at risk from exposure to or contact with toxic chemical agents)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:9970 HCAPLUS
DOCUMENT NUMBER: 136:74314
TITLE: Preparation of 2-arylbenzimidazole sulfonic acids and
their application as UV filters
INVENTOR(S): Heywang, Ulrich; Schwarz, Michael; Pfluecker, Frank
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
EP 1167359	A1	20020102	EP 2001-115113	20010621
EP 1167359	B1	20040428		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 10030664	A1	20020110	DE 2000-10030664	20000623
JP 2002053559	A2	20020219	JP 2001-186026	20010620
AT 265438	E	20040515	AT 2001-115113	20010621
US 2002013474	A1	20020131	US 2001-887265	20010625
US 6593476	B2	20030715		
			DE 2000-10030664 A	20000623

PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 136:74314
GI



AB The invention concerns the synthesis of 2-aryllbenzimidazole sulfonic acids (I) by the reaction of o-phenylene diamine derivs. (II) with (III), R groups are defined, in the presence of activated **sulfuric** acid at 160-190°C; the products are used as UV filters in cosmetic compns. along with other UV filters. Thus 2-phenylbenzimidazole-4,6-disulfonic acid was prepared by the reacting o-phenylenediamine with benzoic acid in oleum containing **sulfuric** acid. A sunscreen spray was prepared from two phases, phase A contained (weight/weight%); Eusolex 2292 7.50; Eusolex HMS 7.00; Steareth-2 0.40; Steareth-10 0.80; Pemulen TR-2 0.18; Propylene glycol isoceteth-3 acetate 5.00; dimethicone 1.00; Oxyne K 0.10. Phase B contained (weight/weight%): 2-phenylbenzimidazole-4,6-disulfonic acid 1.00; triethanol amine 0.90; 1,2-propanediol 2.00; preservative (0.05% propyl-4-hydroxybenzoate and 0.15% methyl-4-hydroxybenzoate) 0.50; water to 100.

IT **8014-95-7**, Oleum

RL: NUU (Other use, unclassified); USES (Uses)

(preparation of 2-arylbenzimidazole sulfonic acids and application as UV filters)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:9969 HCAPLUS

DOCUMENT NUMBER: 136:74313

TITLE: Preparation of 2-phenylbenzimidazole sulfonic acids and their application as UV-B filters

INVENTOR(S): Heywang, Ulrich; Schwarz, Michael; Pfluecker, Frank

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

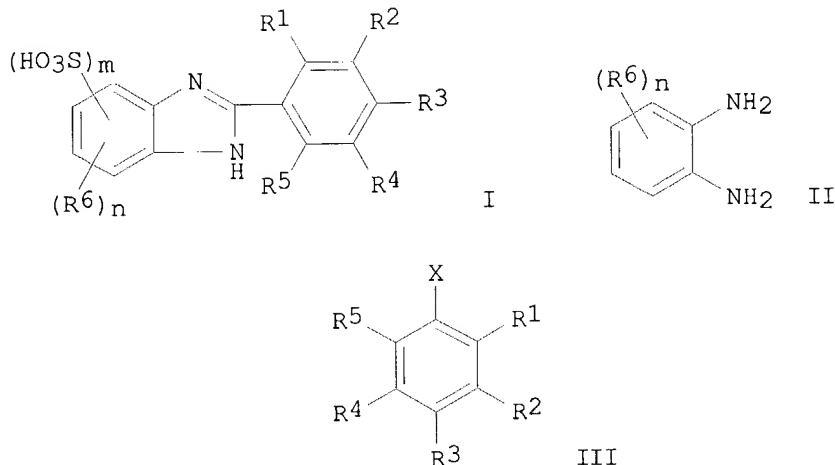
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

EP 1167358 A1 20020102 EP 2001-115094 20010621
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 DE 10030663 A1 20020110 DE 2000-10030663 20000623
 JP 2002047275 A2 20020212 JP 2001-185703 20010620
 US 2002016349 A1 20020207 US 2001-885967 20010622
 US 2002055532 A1 20020509 US 2001-989172 20011121
 US 6440401 B1 20020827
 PRIORITY APPLN. INFO.: DE 2000-10030663 A 20000623
 US 2001-885967 A1 20010622
 OTHER SOURCE(S): MARPAT 136:74313
 GI



AB The invention concerns the synthesis of 2-phenylbenzimidazole sulfonic acids (I) by the reaction of o-phenylene diamine derivs. (II) with (III), R groups are defined, in the presence of activated **sulfuric** acid at 160-190°C; the products are used as UV-B filters in cosmetic compns. along with UV-A filters. Thus 2-phenylbenzimidazole-4,6-disulfonic acid was prepared by reacting o-phenylenediamine with benzoic acid in oleum containing **sulfuric** acid. A sunscreen spray was prepared from two phases, phase A contained (weight/weight%); Eusolex 2292 7.50; Eusolex HMS 7.00; Steareth-2 0.40; Steareth-10 0.80; Pemulen TR-2 0.18; Propylene glycol isoceteth-3 acetate 5.00; dimethicone 1.00; Oxynex K 0.10. Phase B contained (weight/weight%): 2-phenylbenzimidazole-4,6-disulfonic acid 1.00; triethanol amine 0.90; 1,2-propanediol 2.00; preservative (0.05% propyl-4-hydroxybenzoate and 0.15% methyl-4-hydroxybenzoate) 0.50; water to 100.

IT **8014-95-7**, Oleum

RL: NUU (Other use, unclassified); USES (Uses)
 (preparation of 2-phenylbenzimidazole sulfonic acids and their application as UV-B filters)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:177721 HCAPLUS

DOCUMENT NUMBER: 135:10212

TITLE: Chemical applications of topology and group theory
 Part 35. Non-octahedral six-coordinate
 tris(dithiolene) and related complexes of the early
 transition metals

AUTHOR(S): King, R. B.

CORPORATE SOURCE: Department of Chemistry, University of Georgia,
Athens, GA, 30602, USA
SOURCE: Journal of Organometallic Chemistry (2001), 623(1-2),
95-100
CODEN: JORCAI; ISSN: 0022-328X
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Group theory forbids either Oh octahedral or D3h trigonal prismatic geometry for a six-coordinate early transition metal complex using a six-orbital sd5 manifold thereby indicating that the observation of trigonal prismatic rather than octahedral metal coordination geometry is not a simple indication of the lack of p orbital participation in the chemical bonding. However, an exptl. observed C3 geometry intermediate between octahedral and trigonal prismatic geometry is allowed by group theory for such an sd5 manifold. Bicapped tetrahedral geometry, which is related to octahedral or trigonal prismatic geometry through combinations of various diamond-square-diamond processes, is also found in a few metal tris(dithiolenes) having saturated or benzenoid bridges between the donor **sulfur** atoms. The distortion of an octahedron to a trigonal prism in six-coordinate complexes of d<4 early transition metals can result from a second-order Jahn-Teller effect involving splitting of the t1u HOMO and the t2g LUMO in order to allow mixing of the resulting e' orbitals in the trigonal prismatic geometry. This effect is favored when the ligands are strong σ -donors but weak π -donors and the metal is not too electropos. such as is the case with many metal tris(dithiolenes). The MS2C2 chelate rings in metal tris(dithiolene) complexes may be regarded as resonance hybrids of ethylenedithiolate and **dithiodiketone** canonical forms having different metal oxidation states. The stereochem. non-rigidity of trigonal prismatic metal tris(dithiolenes) observed exptl. by NMR requires interchange of the ligands on the top and bottom rings of the trigonal prism so that a simple trigonal twist through an octahedral intermediate is not adequate to account for this observation. A 'rotary elec. **switch**' mechanism has been proposed for this process but rearrangement mechanisms through bicapped tetrahedral intermediates also appear reasonable.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:493550 HCAPLUS
DOCUMENT NUMBER: 133:101736
TITLE: A reagent system and method for increasing the
luminescence of lanthanide(iii) macrocyclic complexes
INVENTOR(S): Leif, Robert C.; Vallarino, Lidia
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000042048	A1	20000720	WO 2000-US1211	20000118
W: CA, CH, DE, FI, GB, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2360054	AA	20000720	CA 2000-2360054	20000118
EP 1150985	A1	20011107	EP 2000-905653	20000118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

US 6340744	B1	20020122	US 2000-484670	20000118
US 2002132992	A1	20020919	US 2001-10597	20011206
US 6750005	B2	20040615		

PRIORITY APPLN. INFO.: US 1999-116316P P 19990119
 US 2000-484670 A1 20000118
 WO 2000-US1211 W 20000118

OTHER SOURCE(S): MARPAT 133:101736

AB Disclosed are a spectrofluorimetrically detectable luminescent composition and processes for enhancing the luminescence of one or more lanthanide-containing macrocycles. The luminescent composition comprises a micelle-producing amount of at least one surfactant, at least one energy transfer acceptor lanthanide element macrocycle compound having an emission spectrum peak in the range from 500 to 950 nm, and a luminescence-enhancing amount of at least one energy transfer donor compound of yttrium or a 3-valent lanthanide element having atomic number 59-71, provided that the lanthanide element of said macrocycle compound and the lanthanide element of said energy transfer donor compound are not identical. The addition of gadolinium(III) in the presence of other solutes to both the prototype and the difunctionalized europium, samarium, and terbium macrocyclic complexes, which were taught in our U.S. patents #5,373,093 and #5,696,240, enhances their luminescence. Similar enhancements of luminescence also results for the mono-functionalized europium, samarium, and terbium macrocyclic complexes, which were taught in our U.S. patent #5,696,240. The enhanced luminescence afforded by the composition enables the detection and/or quantitation of many analytes in low concns. without the use of expensive, complicated time-gated detection systems.

IT **7704-34-9, Sulfur**, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (reagent system and method for increasing luminescence of
 lanthanide(iii) macrocyclic complexes)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:148648 HCAPLUS

DOCUMENT NUMBER: 124:281291

TITLE: Skin irritation: reference chemicals data bank

AUTHOR(S): Bagley, D. M.; Gardner, J. R.; Holland, G.; Lewis, R.
 W.; Regnier, J. F.; Stringer, D. A.; Walker, A. P.

CORPORATE SOURCE: Colgate Palmolive Co., Piscataway, NJ, 08855-1343, USA

SOURCE: Toxicology in Vitro (1996), 10(1), 1-6

CODEN: TIVIEQ; ISSN: 0887-2333

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A list of 176 chems., all of high or constant purity and stable on storage, has been developed using available comprehensive in vivo rabbit skin irritation data. No new in vivo testing was conducted to qualify a chemical for inclusion in the list. The chems. were tested undiluted in vivo studies, apart from those chems. where high concns. could be expected to cause severe effects. The in vivo data were generated in studies carried out since 1981 according to OECD Test Guideline 404 and following the principles of Good Laboratory Practice. The data were obtained from tests normally using at least three rabbits evaluated at the same time, involving application of 0.5 g or 0.5 mL to the flank under semi-occlusive patches for 4 h, and in which observations were made at least 24, 48 and 72 h after removal of the patch. The chems. represent a range of chemical classes [acids, acrylates/methacrylates, alcs., aldehydes, alkalis, amines, brominated derivs., chlorinated solvents, esters, ethers, fatty acids and mixts., fragrance oils, halogenated aroms., hydrocarbons (unsatd.), inorgs., ketones, nitriles, phenolic derivs., S-containing compds., soaps/surfactants, triglycerides] and different degrees of irritancy. They are ranked for skin irritation potential on the basis of a 'primary

irritation index. These chems. could be used in validation tests of promising alternatives to the in vivo rabbit skin irritation/corrosion test. This is an essential step in the progression to regulatory acceptance of alternative procedures.

IT **431-03-8, Diacetyl 7704-34-9D, Sulfur**

, compds.

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(skin irritation - reference chems. data bank)

L10 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:634751 HCAPLUS

DOCUMENT NUMBER: 123:14301

TITLE: Hydrometallurgical recovery of gold using heterocyclic aromatic compounds containing nitrogen or **sulfur**

INVENTOR(S): Kristjansdottir, Sigridur Soley; Thompson, Jeffery Scott

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511319	A1	19950427	WO 1994-US11047	19941006
W: AU, BR, CA, CN, GE, KG, KZ, NZ, RU, TJ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5484470	A	19960116	US 1994-281966	19940728
ZA 9407746	A	19960404	ZA 1994-7746	19941004
CA 2171715	AA	19950427	CA 1994-2171715	19941006
AU 9480121	A1	19950508	AU 1994-80121	19941006
AU 677450	B2	19970424		
CN 1133617	A	19961016	CN 1994-193882	19941006
BR 9407860	A	19970520	BR 1994-7860	19941006
RU 2114926	C1	19980710	RU 1996-109466	19941006
PRIORITY APPLN. INFO.:			US 1993-140803	A 19931021
			US 1994-281966	A 19940728
			WO 1994-US11047	W 19941006

AB The dissoln. of Au in a bath containing an oxidant and ligand is improved by the catalytic addition of heterocyclic aromatic compds. containing N or S in the ring. The process is suitable for improved Au recovery from ores by leaching with cyanide, hypochlorite, or other solns. in the presence of the catalytic addns. The Au dissoln. by aqueous 0.1% NaOCl-2.5% NaCl solution at pH 8.5 is improved in the presence of 2,3-lutidine to 8.1 µg/cm²-h, with no leaching in the absence of activator.

IT **492-73-9, 2,2'-Pyridil**

RL: CAT (Catalyst use); USES (Uses)

(leaching promoter; gold leaching enhanced with heterocyclic aromatic compds. containing nitrogen or **sulfur**)

IT **7704-34-9D, Sulfur, heterocyclic ring compds.**

RL: CAT (Catalyst use); USES (Uses)

(leaching solution containing; gold leaching enhanced with heterocyclic aromatic compds. containing nitrogen or **sulfur**)

L10 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:662443 HCAPLUS

DOCUMENT NUMBER: 121:262443

TITLE: French limiting values for occupational exposure to

chemicals
 AUTHOR(S): Anon.
 CORPORATE SOURCE: Fr.
 SOURCE: Cahiers de Notes Documentaires (1993), 153, 557-74
 CODEN: CNDIBJ; ISSN: 0007-9952
 DOCUMENT TYPE: Journal
 LANGUAGE: French
 AB Limit values (suggested limiting values and maximum permissible values) for occupational exposure to chems., including carcinogens, which have been published by the French Labor Ministry are presented in one table. This table is preceded by information on the following points: monitoring of workplace atmospheres (sampling and anal.; aerosols); permitted values (definitions and aims; additivity convention; elements and compds.; limiting occupational exposure values; carcinogens); mandatory values; and values recommended by the French National Health Insurance Fund (CNAM).
 IT **123-42-2, Diacetone alcohol 2551-62-4**
2699-79-8, Sulfuryl fluoride 7446-09-5,
Sulfur dioxide, biological studies 7783-06-4, Hydrogen sulfide, biological studies
 RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
 (occupational exposure; occupational exposure and stds. for limiting workplace concns. of chems. in France)
 L10 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1993:65829 HCAPLUS
 DOCUMENT NUMBER: 118:65829
 TITLE: Air contaminants
 CORPORATE SOURCE: Occupational Safety and Health Administration, U. S. Dep. Labor, Washington, DC, 20210, USA
 SOURCE: Federal Register (1992), 57(114, Bk. 2), 26002-601, 12 Jun 1992
 CODEN: FEREAC; ISSN: 0097-6326
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Proposed amendments of existing air contaminant stds. for the maritime and construction industries and extension of air contaminant stds. to agricultural employees (only employees of farms with >10 nonfamily employees are covered) are given under the Federal Occupational Safety and Health Administration. Tables that indicated transitional limits, based on established threshold limit values, indication of skin protection needs, proposed time-weighted average exposure (any 8-h work shift for 40-h week), short-term exposure limit (15-min time-weighted average), ceiling (exposure during any part of the work day, or if instantaneous monitoring is not feasible, the 15-min time-weighted average), and/or skin protection needs are given for the shipyard, marine terminal and longshoring, construction, and agricultural industries. Extensive data on health effects of the substances to be regulated and preliminary regulatory impact analyses are given for general industry and the specific industrial sectors.
 IT **123-42-2, Diacetone alcohol 2551-62-4**
, Sulfur hexafluoride 2699-79-8, Sulfuryl fluoride 7446-09-5, Sulfur dioxide, biological studies 7719-09-7, Thionyl chloride 7783-06-4, Hydrogen sulfide, biological studies 7783-60-0, Sulfur tetrafluoride 10025-67-9, Sulfur monochloride 10546-01-7, Sulfur pentafluoride
 RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
 (exposure limits to airborne, in agricultural and construction and maritime industries, stds. for)

L10 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:46305 HCAPLUS
 DOCUMENT NUMBER: 116:46305
 TITLE: Chemical warfare agent decontaminant composition
 containing an alkali metal salt of oximes, phenols, or
 PEG monoethers
 INVENTOR(S): Bannard, Robert Alexander Brock; Casselman, Alfred
 Angus; Purdon, John Garfield; Mendoza, Celso Enriquez
 PATENT ASSIGNEE(S): Canada, Minister of National Defence, Can.
 SOURCE: Brit. UK Pat. Appl., 29 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2239598	A1	19910710	GB 1987-6494	19870319
GB 2239598	B2	19911030		
CA 1321950	A1	19930907	CA 1986-521284	19861024
US 5071877	A	19911210	US 1989-364671	19890411
WO 9207627	A1	19920514	WO 1990-CA424	19901102
W: NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 555208	A1	19930818	EP 1990-917381	19901102
EP 555208	B1	19950607		
R: BE, CH, DE, DK, FR, IT, LI, SE				
NO 9301579	A	19930702	NO 1993-1579	19930430
PRIORITY APPLN. INFO.:				
			CA 1986-521284	19861024
			US 1987-26396	19870224
			US 1988-259978	19881005
			WO 1990-CA424	19901102

AB A decontamination **cream** or **lotion** comprises an alkali metal salt of certain oximes, phenols, or PEG monoethers dispersed in a substantially anhydrous state in a base medium comprising a PEG which has been partially etherified to reduce the free OH group content. These compns. are effective against chemical warfare agents such as nerve agents and mustard gas. Base **cream** MG2 (PEG 550 monomethyl ether 50, PEG 1900 monomethyl ether 50 weight%) provided significant levels of protection against HD challenge. When MG2 contained 1.25 M K acetophenone oximate or K **2,3-butanedione** monoximate, the **cream** provided high levels of protection against HD, VX, and GD.
 IT **505-60-2**, HD
 RL: BIOL (Biological study)
 (protection against and decontamination of, alkali metal salts of phenols or oximes or PEG ether in **cream** or **lotion** for)

L10 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1991:499344 HCAPLUS
 DOCUMENT NUMBER: 115:99344
 TITLE: Phenol or oxime salt-containing protective composition
 against chemical warfare agents
 INVENTOR(S): Bannard, Robert Alexander Brock; Casselman, Alfred
 Angus; Purdon, John Garfield; Bovenkamp, John William
 PATENT ASSIGNEE(S): Canada, Minister of National Defence, Can.
 SOURCE: Brit. UK Pat. Appl., 13 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2237739	A1	19910515	GB 1985-7544	19850322
GB 2237739	B2	19911030		

PRIORITY APPLN. INFO.: GB 1985-7544 19850322

AB The title composition comprises: (a) an alkali metal salt of phenol, acetophenone oxime, acetone oxime or **2,3-butanedione** monoxime; (b) 18-crown-6 or cyptand-[2,2,2]; and (c) a solvent (dioxolane, dimethoxyethane, polyethylene glycols and polyethylene glycol mono- and di-ethers), together with, if necessary, water in an amount just sufficient to ensure that the alkali metal salt is in solution. Such compns. can be formulated as **creams** and used on the skin. A **cream** was formulated from 0.625M K phenoxide in PEG-750 mono Me ether, containing 18-crown-6. The amts. of phenoxide and 180-crown-6 were equimolar. Applied as a 1 mm film, the **cream** prevented mustard gas penetration in vitro.

IT **505-60-2**, Mustard gas
 RL: BIOL (Biological study)
 (protectants against, phenol or oxime salts-containing)

L10 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1991:487007 HCAPLUS
 DOCUMENT NUMBER: 115:87007
 TITLE: Efficacy of an oximate-based skin decontaminant against organophosphate nerve agents determined in vivo and in vitro

AUTHOR(S): Sawyer, Thomas W.; Parker, Deborah; Thomas, Norleen; Weiss, M. Tracy; Bide, Richard W.
 CORPORATE SOURCE: Def. Res. Establ., Suffield/Ralston, AB, Can.
 SOURCE: Toxicology (1991), 67(3), 267-77
 CODEN: TXCYAC; ISSN: 0300-483X

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Recent Canadian research efforts have been directed towards the development of a reactive skin decontaminant (RSD) **lotion** active against classical nerve agents and mustard. The formulation presently under study consists of a 1.25 m solution of potassium **2,3-butanedione** monoximate (KBDO) in polyethylene glycol Me ether 550. Although this formulation has shown good efficacy, concern has been expressed as to the potential toxicity of the reaction products of KBDO and organophosphate (OP) nerve agents. This report describes the high efficacy of this **lotion** in inactivating OPs as measured by the systemic toxicity of the OP/RSD mixts. in rats. In addition, primary cultures of chick embryo neurons were also used to test the efficacy of the RSD. By relating the anticholinesterase activity in these cultures of the OP/RSD mixture to that of pure OP stds., a sensitive measure of the value of the RSD in inactivating tabun, sarin, soman and VX was obtained. Expts. with all 4 nerve agents in this in vitro system provided a good correlation with the in vivo data, and also indicated that the inactivation process was time- and agent-dependent and also related to the ratio of OP to RSD.

IT **505-60-2**, Mustard gas
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
 (toxicity of, **butanedione** monooximate prevention against)

L10 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1989:218230 HCAPLUS
 DOCUMENT NUMBER: 110:218230
 TITLE: Air contaminants
 CORPORATE SOURCE: United States Occupational Safety and Health Administration, Washington, DC, 20210, USA
 SOURCE: Federal Register (1989), 54(12, Bk. 2), 2332-983, 19 Jan 1989

CODEN: FEREAC; ISSN: 0097-6326

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Under the Federal Occupational Safety and Health act, OSHA is amending existing air containment stds. and setting new permissible exposure limits for toxic substances commonly used in the workplace.

IT 123-42-2, Diacetone alcohol 2551-62-4
, Sulfur hexafluoride 2699-79-8, Sulfuryl fluoride 7446-09-5, Sulfur dioxide, biological studies 7719-09-7, Thionyl chloride 7783-06-4, Hydrogen sulfide, biological studies 7783-60-0, Sulfur tetrafluoride 10025-67-9, Sulfur monochloride 10546-01-7, Sulfur pentafluoride

RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
(air pollution by, occupational exposure to, stds. for, in USA)

L10 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1967:420710 HCAPLUS

DOCUMENT NUMBER: 67:20710

TITLE: Volatile components of raw chicken breast muscle

AUTHOR(S): Grey, T. C.; Shrimpton, D. H.

CORPORATE SOURCE: Low Temp. Res. Sta., Cambridge, UK

SOURCE: British Poultry Science (1967), 8(1), 23-33

CODEN: BPOSA4; ISSN: 0007-1668

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Major pectoral muscles were obtained from White Leghorn cockerels and Light Sussex hens aged 11-15 months. Minced samples of the raw muscle were heated at 50° in a special apparatus and the volatile components were collected in a trap placed in liquid O. Gas-liquid chromatog. was used for the fractionation and for the identification of the volatile components. A total of 14 components, which included acetaldehyde, 2-propanone, and 3-methyl-2-butanone, were identified in the muscle obtained from birds immediately following death. Birds which were stored unviscerated at room temperature for 4 days yielded 21 components. By comparison with the fresh sample, in the stored sample EtOH increased 100-fold, 2-butanone increased 20-fold, and most of the other compds. increased 2-5-fold. The new compds. found in the stored sample were MeOH (in concns. comparable to EtOH), 2,3-

butanedione, hexanal, 4-methyl-pentanal, and 2-hexanone. From the cecum of the living bird, anesthetized with ether, the volatile components were collected in situ. Out of a total of 10, the components present in the largest amts. were ether, EtOH, and an unidentified carbonyl (I). In the sample obtained from the cecum 18 hrs. after death the relative concentration of most of the components was increased, the concentration of

ether was decreased, and an addnl. 11 components were detected. The compds. present in the largest amts. were: I, EtOH, 5-methyl-hexanal, and hexanal. It is proposed that the volatile components present in the muscle may be classified in 2 groups depending upon their origin: those that are endemic, mainly carbonyl compds., and those that are adventitious, mainly thiols, sulfides, and alcs. The microflora present in the cecum may be a major metabolic source of the adventitious muscle components.

IT 431-03-8 7783-06-4, biological studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

BIOL (Biological study); OCCU (Occurrence)

(in chicken, storage and)

L10 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1967:76559 HCAPLUS

DOCUMENT NUMBER: 66:76559

TITLE: Reaction of **sulfur** chlorides with polymers and monomers
 INVENTOR(S): Akobjanoff, Lev
 SOURCE: U.S., 6 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3296203		19670103	US	19580313
AB	Treatment of unsatd. polymers and monomers with sulfur chlorides (I) (S ₂ Cl ₂ , SCl ₂ , or S ₄ Cl ₂) produces maximum crosslinked polymers (hard resinous or plastic masses) by using 0.5 equivalent I/unsatn. and moderately crosslinked reactive polymers (polysulfenyl chlorides, usually viscous oil) by using >0.5 equivalent I. Thus, 160 g. SCl ₂ in 800 ml. benzene was added to 100 g. pale crepe natural rubber in 2000 ml. benzene. The gelation times (min.) of the solution upon the addition of 4 g., 10 g., 32 g., 92 g., and 160 g., SCl ₂ /100 g. rubber were 80, 5, 0.1, 1, and ∞. The last composition remained dispersed indefinitely. On evaporation of the solvent, cream -colored, hard, more brittle than elastic depolymerizates were obtained. Similarly reacted were butyl rubber, cyclized rubber, turpentine, CH ₂ (COMe) ₂ , diacetone alc ., malonate, glycol, resorcinol, p-C ₆ H ₄ (NH ₂) ₂ , sucrose, and urea. Treatment of a poly(sulfenyl chloride) with acetone, MeOH, nonenes, urea, and water gave similar products. The poly(sulfenyl chloride) of soybean oil was also treated with glycerol, EtOCH ₂ CH ₂ OH, pyridine, NH ₃ , and water to give leathery to rubbery products. The poly(sulfenyl chloride) of natural rubber can be used as a coating and binder for vulcanized rubbers.				
IT	123-42-2 RL: USES (Uses) (reaction products with sulfur chloride (SCl ₂))				
IT	10025-67-9 10545-99-0 15731-86-9 RL: USES (Uses) (reaction products with unsatd. monomers and polymers, crosslinking and depolymn. in relation to)				

L10 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1956:89208 HCAPLUS
 DOCUMENT NUMBER: 50:89208
 ORIGINAL REFERENCE NO.: 50:16774b-i,16775a-i,16776a-i,16777a-d
 TITLE: Ethynylation. IV. Reactions of α-alkynols and γ-alkynediols

AUTHOR(S): Reppe, Walter; et al.
 SOURCE: Ann. (1955), 596, 38-79
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 50:89208

AB Hydrogenation to unsatd. and saturated alcs. and glycols, hydration, addition of HCl and NaHSO₃, oxidation of VIa to (HOCR₃R₄C.tplbond.C)₂ (XXIIIc), esterification and etherification, and the preparation of amino- and haloalkynes are discussed. A selective catalyst (XXIV) for hydrogenation of VIa to olefinic alcs. is prepared by vacuum impregnating 1 kg. granular kieselguhr with solns. of 0.65 g. PdCl₂ and of 13 g. FeCl₃ each in 400 ml. H₂O, drying, boiling 1 l. 0.5 hr. with 500 ml. concentrated water glass solution and 2.5 l. H₂O, filtering (vacuum) after 12 hrs., drying at 100°, and reducing with H at 140-50°. XXIV contains 1.5% free alkali. Distillation of 500 g. condensate from passing 25% aqueous XX and H over XXIV at 140-50° gives a little EtCHO, a mixture (b. 80-92°) containing 110 g. CH₂:CHCH₂OH, 12 g. PrOH with 12% H₂O, and a trace of XX. Similarly prepared from the corresponding VIa are: CH₂:CHCH(OH)Me, b. 97°

(azeotrope containing 26% H₂O, b. 85-6°); Me₂C(OH)CH:CH₂, b. 99°; CH₂:CHCMe(OH)Et, b. 118°; and 1-vinyl-1-cyclohexanol, b₂₀₇₇, m. 4°. These compds. can also be prepared with Fe powder (prepared from Fe carbonyl) as catalyst at 50°, 100 atmospheric H, reduction being stopped when the calculated amount of H has reacted. XXIII (200 g.), hydrogenated at room temperature and 50 atmospheric over 5 g. Raney Ni until half the calculated amount of H has reacted, then at 80° and 200 atmospheric to complete reaction gives 185 g. Me₂C(OH)Et, b. 102°. PrOH, sec-BuOH, MeEt₂COH, b. 124°, and 1-ethyl-1-cyclohexanol, b₄₀ 93°, are prepared similarly. Catalyst for preparing aldehydes and ketones from acetylenic alcs. is prepared from 500 g. kieselguhr containing 3% Fe, and 0.6% S (as SO₄--), made into a paste with 5 g. PdCl₂.2H₂O in 200 ml. H₂O, dried, powdered, pelleted, and reduced with H at 200°. XX (35 g.) and 15 g. H₂O are vaporized over 100 ml. of this catalyst at 105° and 40 l. H for 1 hr. Distillation of 500 g. of condensate gives 300 g. EtCHO. MeCOEt is prepared similarly from XIb. Crude IX from 30% VIII, 1.5 kg., hydrogenated over 50 g. Raney Ni (or other common hydrogenation catalysts) at 40-60° and 200 atmospheric (with cooling to control reaction) gives 500 g. (CH₂CH₂OH)₂, m. 20.1°, b. 229, b_{0.7} 106°, d₂₀ 1.069, n_{D20} 1.4461, bis-urethan, m. 198-200°. HOCH₂CH₂CH₂CH(OH)Me, b₁₅ 125-8°, [MeCH(OH)CH₂]₂, b₁₈ 132-3°, b_{0.4} 95-1000 (diacetate, b₁₅ 114°), [Me₂C(OH)CH₂]₂, b₁₅ 117-18°, m. 91° (from EtOAc), and 1,1'-ethylenedicyclohexanol, b₂ 145°, m. 128-30°, are also prepared in similar yields. (CH₂CH₂OH)₂ (180 g.) heated 4 hrs. with 5 g. FeCl₃ and 60 g. (CH₂O)_n (or 30-40% VIII) gives 184 g. acetal, b. 117°. IX (500 g. 33%), and 50 g. Fe (prepared from Fe carbonyl), treated at 50° with 100 atmospheric H and reaction stopped when the calculated amount of H has reacted give 150 g. (HOCH₂CH:)₂ (XXV), b. 237-9°, b₃ 116-21°, m. 4°; diacetate, b₁₃ 108-10°; "formaldehyde acetal," b. 126°. Other suitable catalysts are Co, poisoned by adding 0.1% KSCN to the solution, and 0.2% Pt-C treated with 0.15% Na₂HPO₄, 0.1% H₃BO₄, or 1.5% C₅H₅N. Partial hydrogenation is also obtained with H containing 3-5% CO. [MeCH(OH)CH:]₂, b₆ 109-11°, [Me₂C(OH)CH:]₂, b₂₀ 120-2°, m. 77°, and 1,1'-vinylendicyclohexanol, m. 154°, are prepared similarly in nearly quant. yield. XX hydrated by heating 1500 g. 30% aqueous solution with 50 g. HgSO₄ and 5 g. concentrated H₂SO₄ to 70° until the carbonyl number is constant, the mixture neutralized, the H₂O azeotroped off with CH₂Cl₂ or XIa, and the residue distilled give 350 g. HOCH₂Ac, b₁₅ 49-51°. The following compds. are similarly hydrated (amount of starting compound, and the product, and its yield and b.p. given): MeOCH₂C.tplbond.CH, 105 g., MeOCH₂Ac, 100 g., b. 114-16°; XIb, -, MeCH(OH)Ac, no yield, b. 138-40°; (MeOCH₂C.tplbond.)₂ (XXVa), -, MeOCH₂COCH₂CH₂OMe, -, b₁₇ 83-5°; IX, 172 g., HOCH₂COCH₂CH₂OH (XXVI), 120 g., b_{0.6} 108-10° [also prepared in 65% yield from 500 ml. 10% aqueous HOCH₂COCH:CH₂ (XXVII) and 6 g. concentrated H₂SO₄, 20-30 hrs. at 30°]; and [MeCH(OH)C.tplbond.]₂, -, MeCH(OH)COCH₂CH(OH)Me, -, b₂ 96-8°. XXIIIa (700 g.) refluxed 3 hrs. with 40% H₂SO₄ gives 280 g. 1-acetyl-1-cyclohexene, b₁₀ 73-5°. HgO (5 g.), 2 g. BF₃-Et₂O, and 2 g. MeOH warmed to 60-70°, mixed with 64 g. MeOH, and 56 g. XX added with stirring at 50-60° so that the mixture refluxes smoothly, cooled after a sample no longer gives a precipitate with ammoniacal XI give 55 g. 2,5-dimethyl-2,5-dimethoxy-1,4-dioxane, m. 126-8° (from MeOH); the 2,5-di-EtO analog, prepared analogously, m. 73-4°. Aqueous XX (25%) passed at 330° (80 ml./hr.) through a 1-m. long porcelain tube containing 450 ml. catalyst (20% Cu, 1-2% Cr₂O₃ on silica gel, activated with H at 200-50°) gives 63% CH₂:CHCHO. H₂C:CHAc, activated with from XIb at 280-300° over 6% H₃PO₄ and 50% NaH₂PO₄ on graphite, b₁₃₀ 33°. XXVI, b₁₀ 45°, is prepared in 20-g. yield (90% pure) from 5 g. HgO, 1.5 g. Cl₃CCO₂H, 5 g. BF₃-Et₂O, and 5 g. EtOAc heated to 50-60°, cooled, added to 100 g. IX in 400 g. EtOAc, warmed to 40°, evacuated until the mixture refluxes at 45°, and the

mixture neutralized with Na_2CO_3 and distilled when the temperature drops rapidly (about 1 hr.). This compound polymerizes in light to a gel and, finally, to a solid, transparent, odorless, high-mol.-weight product. XXVI (300 g.) added to 700 g. boiling Ac_2O , and refluxed 1 hr., gives 260 g. $\text{AcOCH}_2\text{COCH}:\text{CH}_2$, b12 81°, polymerizes to a gummy mass in a few days; 256 g. heated to 60° with 0.5 g. p- $\text{PhCH}_2\text{NHC}_6\text{H}_4\text{OH}$ 2 days gives 240 g. 2-acetoxyacetyl-6-acetoxymethyl-2,3-dihdropyran, b1 171°, m. 49°. IX (430 g.) in 700 ml. MeOH, added to catalyst mixture prepared by warming 15 g. HgO , 15 g. $\text{BF}_3\text{Et}_2\text{O}$, and 30 ml. MeOH, the temperature held to 30° by cooling, warmed a short time with 500 ml. 1% H_2SO_4 after reaction heat has died away, neutralized with Na_2CO_3 , filtered, and distilled gives $\text{MeOCH}_2\text{CH}_2\text{COCH}_2\text{OH}$ (XXVIII), b7 84-7°. Separating Hg from the solution, distilling the excess MeOH, and cooling the mixture gives 2,5-dimethoxy-2,5-bis(β -methoxyethyl)-1,4-dioxane, m. 82°; this hydrolyzes to XXVIII on warming with dilute H_2SO_4 . $\text{EtOCH}_2\text{CH}_2\text{COCH}_2\text{OH}$, b16 104-6°, and iso- $\text{PrCH}_2\text{CH}_2\text{COCH}_2\text{OH}$, b5 94°, are prepared analogously. H_2SO_4 (35 g.) and 125 g. 50% $\text{HOCH}_2\text{C.tplbond.CCHMeOH}$ treated at 60° and 130 mm. with an addnl. 375 g. of the diol gives 60 g. $\text{CH}_2:\text{CHCOCH}_2\text{CH}_2\text{OH}$ (or $\text{MeCH}:\text{CHCOCH}_2\text{OH}$), b18 75°. [$\text{MeCH}(\text{OH})\text{C.tplbond.}$]₂ (200 g.) in 800 ml. H_2O mixed with 10 g. HgSO_4 in 60 g. 17% H_2SO_4 at 30-5° (with cooling) gives 140 g. $\text{MeCH}:\text{CHCOCHMeOH}$, b2 48°. Hydrogenation of the corresponding oxo alcs. or glycols over Raney Ni at 200 atmospheric and 25-120° gives the following compds. in good yield: [$\text{MeCH}(\text{OH})$]₂ (XXVIIIa), b. 179°; $\text{HOCH}_2\text{CH}_2\text{EtOH}$, b. 191°, b10 96-7°, from XXVII [40% solution of XXVI (prepared from 500 g. 33% aqueous IX, 5 g. HgSO_4 , and 10 g. concentrated H_2SO_4 at 30°) adjusted to pH 5 with CaCO_3 and the precipitate filtered off and hydrogenated at 150° and 100 atmospheric gives 120 g. XXVIIIa; diacetate, b20 85-90°]; $\text{HOCH}_2\text{CH}(\text{OH})\text{CH}_2\text{CH}_2\text{OH}$, b1 130-1° (cyclic formaldehyde acetal, $\text{C}_5\text{H}_{10}\text{O}_3$, prepared with $(\text{CH}_2\text{O})_n$ and FeCl_3 , b. 198-9°, b0.1 67-8°). The following $\text{HOCH}_2\text{CH}(\text{OH})\text{CH}_2\text{CH}_2\text{OR}$ are similarly prepared from the 2-oxo precursor (R given): Me, b12 116°; Et, b10 122°; iso-Pr, b10 126-7°; tert-Bu, b4 110-11°. [$\text{MeCH}(\text{OH})\text{C.tplbond.}$]₂ (400 g.) and 600 ml. H_2O stirred and treated at 70-80° during 40 min. with 40 g. HgSO_4 , neutralized after 25 min. with Na_2CO_3 , made weakly acidic with dilute H_2SO_4 , neutralized with CaCO_3 , filtered off, and hydrogenated at 100° and 200 atmospheric over 200 g. "nickel-chromium oxide" catalyst, give 150 g. $\text{Me}[\text{CH}(\text{OH})]_2\text{Pr}$, b0.7-0.8 102° (gives deep blue color with $\text{CuSO}_4\text{-NaOH}$), and a little $\text{Me}[\text{CH}(\text{OH})]_2\text{CH}_2\text{CHMeOH}$, b0.7 140-50°. $\text{HOCH}_2\text{CH}_2\text{EtOH}$ (50 g.) and 5 g. p- $\text{MeC}_6\text{H}_4\text{SO}_3\text{H}$ (or KHSO_4) heated rapidly to 160° with removal of H_2O give 4 g. PrCHO and 25 g. 2,5-diethyldioxane, b21 62°; 50 g. XXVIIIa and 6 g. of a mixture of equal parts of p- $\text{MeC}_6\text{H}_4\text{SO}_3\text{H}$ and KHSO_4 give 65 g. 2,3,5,6-tetramethyl-1,4-dioxane, b. 138-9°; $\text{HOCH}_2\text{CH}(\text{OH})\text{CH}_2\text{CH}_2\text{OH}$ gives 0% 2,5-bis(β -hydroxyethyl)dioxane, b20 90°. XIb (125 g., 60%) is added during 5 hrs. to 500 ml. of a distilling solution containing 3.8% FeSO_4 , 41.4% $\text{Fe}_2(\text{SO}_4)_3$, 0.15% HgSO_4 , and 1.2% H_2SO_4 (the original volume maintained by adding H_2O) and the distillate saturated with NaCl and redistd. gives 20 g. Ac_2 , b. 87-8°. ($\text{MeCH}(\text{OH})\text{C.tplbond.}$)₂ (300 g.) refluxed with 143 g. 80% H_3PO_4 , 1.5 g. HgSO_4 , and 1 l. H_2O , gives 260 g. AcCOPr , b150 82-5°, dioxime, m. 173°, dioxime-nickel complex, orange-red, m. 158-60°, and as by-product, 2,5-dimethyl-3-oxotetrahydrofuran, b150 94-5° (semicarbazone, m. 168-71°). $\text{HOCH}_2\text{CH}(\text{OH})\text{Et}$ passed at 180° over granular CuO is converted in 32% yield to a mixture containing about 45% EtCOCHO (XXIX) and HOCH_2COEt . IX (200 g.), 40 g. HgCl_2 , and 400 g. $(\text{CH}_2\text{OH})_2$ heated 4 hrs. at 185° give 160 g. XXIX diethylene glycol acetal ($\text{C}_8\text{H}_{14}\text{O}_4$), b12 100-5°, which partly crystallized on standing; 100 g. of this and 500 ml. 1% H_2SO_4 stirred 9 hrs. at 90° give XXIX, which polymerizes rapidly (dioxime, m. 129°), and XXIX monoethylene glycol acetal, b12 90-5°. XXVI (104 g.) and 300 ml. 30% VIII added at 70-80° to 500 g. CuSO_4 in 2 l. H_2O and 2 kg. 20% NH_3 , held at 70-85° 1-2 hrs., and the Cu complex filtered off, suspended in H_2O ,

decomposed with H₂S, and the aqueous solution distilled give (2-hydroxyethyl)imidazole, b1 170-5° (picrate, m. 144°); this with SOCl₂ gives (β-chloroethyl)imidazole which with alc. NH₃ gives **histamine** di-HCl, m. 236-8° (picrate, m. 144°). IX (60 g.) heated 13 hrs. with 150 g. MeOH and 3 g. ZnCO₃, gives EtCH(OH)CO₂Me, b30 68°; other esters of this acid prepared similarly are: Et, b. 167-9°; Bu, b. 200-2°; allyl, b20 85-8°; PhCH₂, b33 170-5°; and cyclohexyl, b37 145-50°. HCl passed into 112 g. XX and 6 g. HgCl₂ heated to 60°, the solution neutralized with alkali when the temperature falls to 70° after reaction ceases, and saturated with K₂CO₃ gives 140 g. CH₂:CClCH₂OH, b. 135-40°; also prepared (225 g.) from 500 g. 30% aqueous XX, provided HCl addition is rapid and temperature held to 80°. XX (60 g.), 100 g. NaHSO₃, and 100 ml. H₂O refluxed several hrs., cooled, filtered, and diluted with MeOH gives NaO₃SCH₂CH(SO₃Na)CH₂OH; analogously, XXIII gives NaO₃SCH₂CH(SO₃Na)CMe₂OH and 200 g. IX give 260 g. HOCH₂(CHSO₃Na)₂CH₂OH. Aqueous XX (38 ml. 27.16%), 85 ml. H₂O, 9 g. XI, and 25 g. NH₄Cl shaken with O at 0° give 9.6 g. (HOCH₂C.tplbond.C)₂, m. 111-12° (from Et₂O-petr. ether) (also prepared in quant. yield by a continuous process), which hydrogenates in MeOH over Raney Ni at 60° and 200 atmospheric to give 1,6-hexanediol, m. 41.5°, b13 143°. Other RC.tplbond.CH oxidized similarly in quant. yield to (RC.tplbond.C)₂ are (R and product consts.): MeCHOH, m. 69-90° (mixture of stereoisomers, m. 68° and 109°, resp.); CH₂:CH, b3 40°; and HO₂CCH₂CH₂, decompose above 220°. A mixture of 60 g. H₂C:CHC.tplbond.CH and 70 g. XXIII gives HOCMe₂C.tplbond.CC.tplbond.CCH:CH₂, b3 75°. XX (9 ml. 97.5%) added to 35 g. Cu(OAc)₂.H₂O and 30 g. NH₄Cl in 90 ml. H₂O (boiled in N) precipitated greenish yellow C₃H₃OCu₂Cl. The following esters of XX are prepared by conventional methods: acetate, b. 110-12°; carbonate (C₇H₆O₃) (from COCl₂), b20 97°; adipate (C₁₂H₁₄O₄), b4 142-5°; benzoate, b9 102-7°; p-nitrobenzoate, m. 88-90° (from ligroine); benzenesulfonate (XXX), b2 140-2°; and p-toluenesulfonate (XXXI), b5 161-2°. Also prepared is HC.tplbond.CCH(OAc)Et, b. 139-40°. XIb esters prepared are: acetate, b. 124-6°; benzoate, m. 27-9° (from ligroine); and p-toluenesulfonate, m. 58-60° (from cyclohexane). Also prepared is (AcOCH₂C.tplbond.)₂, b3 106°. Me₂SO₄ (75 g.) added at 40° to 56 g. XX in 44 ml. H₂O and 110 g. 50% NaOH so that the temperature stays below 60°, stirred 2 hrs. at 50-60°, and distilled gives 62 g. MeOCH₂C.tplbond.CH, b. 65°. Ethylene oxide (45 g.) and 58 g. 96% XX added rapidly and simultaneously to 300 ml. 2% NaOH and neutralized after 1 hr. give 41 g. HOCH₂(CH₂OCH₂)₂C.tplbond.CH, b12 76-7°, b14.5 79-80°. CH₂:CHCN (53 g.) added to 60 g. 94% XX (dried over K₂CO₃ just before use) and 0.5 g. powdered NaOH, the temperature allowed to rise to 100°, then held at 50° 1 hr. with cooling, neutralized with dilute H₂SO₄ and distilled gives 75 g. HC.tplbond.CCH₂OCH₂CH₂CN, b13 101-2°. PhOH (200 g.), 500 g. XXX, 315 ml. 35% NaOH, and 1.5 l. H₂O stirred 2 hrs., heated to 90-5°, poured onto ice, and extracted with Et₂O give 200 g. HC.tplbond.CCH₂OPh, b10 81-3°. Other HC.tplbond.CCH₂OR prepared similarly using XXX or XXXI are (R and m.p. or b.p.): o-O₂NC₆H₄, m. 78-9° (from MeOH); p-O₂NC₆H₄, m. 118-20°; o-OCHC₆H₄, m. 72-4° (from ligroine); pyrocatechol, b13 121-4°; β-naphthyl, m. 64-6° (from MeOH). Crude XXX (670 g.), and 250 ml. 35% NaOH added in 4 portions to 250 g. o-HOC₆H₄NHAc in 1670 ml. H₂O, the mixture heated 1 hr. to 90°, treated with 30 ml. NaOH, cooled, and extracted with Et₂O, the extract washed with 15% HCl, then 5% NaOH, and evaporated, and the residue heated 1 hr. with 1 l. 1:1 HCl give 81 g. o-HC.tplbond.CCH₂OC₆H₄NH₂. Similarly, p-HOC₆H₄CO₂Me gives p-HC.tplbond.CCH₂OC₆H₄CO₂H, m. 212-14° (from MeOH) 40 g. XXX gave 10 g. p-HC.tplbond.CCH₂OC₆H₄NHAc, m. 109-11°; hydrolysis gives the amine, b4 118-20°, from which an azo dye is prepared by diazotization and coupling with 1-phenyl-3-methyl-5-pyrazolone. (XXVa) b14 58°, is prepared in 400 g. yield by adding 1350 g. Me₂SO₄ and 1075 g. 40% NaOH to

400 g. IX in 400 ml. H₂O at 40° so that the temperature remains constant without heating, stirring 2 hrs. at 50-60°, separating layers, treating the lower layer with another 600 g. Me₂SO₄ and 475 g. 40% KOH, and distilling the organic layers. Similarly 72 g. XXXIII gives 65 g. [Me₂C(OMe)C.tplbond.]₂ (XXXII), b₁₉ 86-8°. Heating 172 g. 50% IX and 400 g. 50% NaOH to 80°, adding 250 g. MeHSO₄ during 1 hr., stirring 4 hrs., and extracting with Et₂O, gives 26 g. HOCH₂C.tplbond.CCH₂OMe, b₃₀ 106°, and 24 g. XXVa. Freshly distilled PhNH₂ (93 g.) and 196 g. XXX mixed in an ice bath (temperature rises to 120°), the solution cooled, 100 ml. Me₂CO added, the crystals washed with Me₂CO, the combined filtrate and washings steam distilled, the distillate extracted with Et₂O, the extract dried and distilled, the base (b₂₈ 146-52°) (37 g.) diluted with 50 ml. C₆H₆, refluxed 1 hr. with 25 ml. Ac₂O, and extracted with HCl, and the extract neutralized give 11 g. PhN(CH₂C.tplbond.CH)₂, b₄ 94-6°. PhNR₁R₂ prepared similarly, using XXXI or the benzene-sulfonate of XIb, are (R₁ and R₂ given): Me, CH₂C.tplbond.CH, b₄ 80-3°, m. 35-6°; Me, CHMeC.tplbond.CH, b₁ 76-8°; CH₂CH₂OH, CH₂C.tplbond.CH, b₂ 135-7°; and CH₂CH₂OH, CHMeC.tplbond.CH, b₃ 137-40°. IX (344 g.) treated during 10 min. with 1200 g. SOCl₂, left overnight at 10-15°, warmed to 80°, SOCl₂ removed at the H₂O pump, and the residue distilled gives 370 g. (ClCH₂C.tplbond.)₂ (XXXIII), b₁₆ 65-6° (reagents in this preparation must be freshly distilled and the distillation residue must not be heated above 100° or an explosion may occur). (Me₂CClC.tplbond.)₂, prepared similarly, b₁₁ 60-70°. IX (344 g.), and 476 g. SOCl₂ as above gives a lava-like mass which, crystallized from Ac₂O or HCONMe₂, gives the cyclic disulfite (C₈H₈O₆S₂) (XXXIV), colorless crystals, m. 196-7°, of IX; IX is recovered in 8.4-g. yield by heating 25 g. XXXIV 0.5 hr. with 100 ml. 30% NaOH. Adding 57 g. 40% aqueous NaOH at 75° to 12.3 g. XXXIII in 50 ml. EtOH gives 1.9 l. (HC.tplbond.C)₂. XXXIII (123 g.) treated with 430 g. pyrrolidone 2 hrs. at 20° gives 170 g. 1,1'-(2-butyrylene)dipyrrolidine, b_{2.5} 116-16.5°; 1,4-dipiperidino derivative (70 g. from 62 g. XXXIII and 180 g. piperidine) b₅ 160-1°.

L10 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1956:58677 HCAPLUS

DOCUMENT NUMBER: 50:58677

ORIGINAL REFERENCE NO.: 50:11032i,11033a-c

TITLE: Theoretical aspects in the manufacture of monoglycerides

AUTHOR(S): Demarcq, M.

SOURCE: Rev. franc. corps gras (1956), 3, 336-51

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Monoglyceride (I) yields obtainable by glycerolysis of triglycerides or partial esterification of fatty acids are compared, and the influence of catalysts, quantity of reagents, temperature, etc. are discussed. The results of Feuge and Baily (C.A. 40, 6273.1) with their theoretical considerations are said to be fortuitous, probably owing to too-small quantities of glycerol in their reaction masses. The yields reported by Hilditch and Rigg (C.A. 30, 1741.8) in the presence of phenols are exceedingly high. In 12 analogous tests only 23.2-61.5% of I could be obtained from 100-200 g. of glycerol for 100 g. of stearic acid at 110-225°, reaction times of 1.18-7 hrs., and varying quantities of SnCl₂, H₂SO₄, NaOH, or camphorsulfonic acid as catalysts. Two tests with dioxane as solvent produced, resp., 33.7 and 39.4% of I, far beneath the yields of Richardson and Eckey (U.S. 2,251,692-3, C.A. 35, 6977.5). The best but uneconomical yields were with pyridine as the solvent, but tertiary BuOH as solvent gave in 12 tests with peanut oil, linseed oil, hydrogenated tallow, and others, with different Na alcoholates as catalysts, only slightly inferior yields; practically equal yields could be produced by employing **diacetone-alc.** solvent which, however, had poor stability. 71 references.

IT 123-42-2, 2-Pentanone, 4-hydroxy-4-methyl-

(oil re esterification with glycerol in)

L10 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1949:22544 HCAPLUS

DOCUMENT NUMBER: 43:22544

ORIGINAL REFERENCE NO.: 43:4234d-i

TITLE: Condensations of **biacetyl** with primary aromatic amines in the presence of concentrated phosphoric acid. I

AUTHOR(S): Christen, F.; Prijs, B.; Lehr, H.

SOURCE: Helvetica Chimica Acta (1949), 32, 56-62

CODEN: HCACAV; ISSN: 0018-019X

DOCUMENT TYPE: Journal

LANGUAGE: German

AB cf. Erlenmeyer and Lehr, C.A. 40, 2797.7, 5090.2. Condensation of aromatic amines, RC₆H₄NH₂ (I), with Ac₂ (II), without solvent or in EtOH, yielded the expected dianils, while the same reaction in concentrated H₃PO₄, 60% H₃AsO₄, or 80% H₂SO₄ (poor yields) proceeds according to 2I + II = C₂₀H₁₈ON₂R₂ (III) + H₂O. Concentrated H₃PO₄ with the dianil from I (R = p-Me) and II also yields III (R = p-Me). III crystallize from EtOH; they form mono-HCl salts and monoacyl derivs., contain 2 active H atoms, 2 double bonds (addition of Br or hydrogenation with Raney Ni), no carbonyl or primary NH₂ group; they do not couple with diazotized 2-Cl₁₀H₇NH₂. FeCl₃ gives no color. A pinewood splinter is colored brown to red (bluish green by III, R = p-CO₂H). Neither I nor II is obtained by treatment of III with acids or bases. Boiling III 3-5 min. with 65% H₂SO₄ yields brown solns.; dilution with H₂O gives blue to green solns., changing to pink or violet with excess alkali; pH ranges for this color change are given. I (R = p-Me) (10.7 g.), kept 24 hrs. at 70° with 10 g. II, and 50 cc. concentrated H₃PO₄ give 6 g. III (R = p-Me), H₂O-insol. yellow prisms, m. 147.5°, mol. weight (Rast) 325, is not changed by boiling aqueous or alc. NaOH. Mono-HCl salt, from III (R = p-Me) with HCl gas in C₆H₆, is decomposed by H₂O or Na₂CO₃; its solution in EtOH is deep blue. Mono-Ac derivative, from III (R = p-Me) with AcCl in C₆H₆ and K₂CO₃, nearly colorless, m. 142.5-3°. Mono-3,5-dinitrobenzoate, yellow, m. 227°. III (R = p-Me) in Et₂O, irradiated 5 hrs. with ultraviolet light, yields a compound C₂₂H₂₄O₃N₂, lemon-yellow, m. 143°. I (R = p-MeO) with II gives III (R = p-MeO), slightly greenish, m. 123.5°. III (R = p-EtO), similarly obtained from I (R = p-EtO), **cream**-colored, m. 123.5°; mono-3,5-dinitrobenzoate, lemon-yellow, m. 176.5°. III (R = p-Cl), yellow, m. 169°. III (R = p-CO₂H), m. 288-9.5° (decomposition), mol. weight (electrometric) 392. III (R = p-Ac), lemon-yellow, m. 202-3°; III (R = p-CO₂Et), colorless, m. 148°.

IT 431-03-8, 2,3-Butanedione

(reaction with primary aromatic amines)

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=> select hit rn 110 1-18

E1 THROUGH E16 ASSIGNED

=> fil reg

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STRUCTURE FILE UPDATES: 30 JUN 2004 HIGHEST RN 701907-96-2
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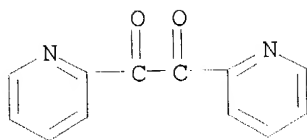
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 L12 3 S L11 AND L1

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L12 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 492-73-9 REGISTRY
 CN Ethanedione, di-2-pyridinyl- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Glyoxal, di-2-pyridyl- (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN α -Pyridil
 CN 1,2-Bis(2-pyridinyl)-1,2-ethanedione
 CN 1,2-Bis(2-pyridyl)-1,2-ethanedione
 CN 2,2'-Dipyridylglyoxal
 CN 2,2'-Pyridil
 CN Bipicolinoyl
 CN Bis(2-pyridyl)ethanedione
 CN **Di-2-pyridyldiketone**
 CN Di-2-pyridylglyoxal
 CN NSC 16545
 FS 3D CONCORD
 MF C12 H8 N2 O2
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB,
 SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
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 DT.CA Caplus document type: Dissertation; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT
 (Reactant or reagent); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); CMBI (Combinatorial study); PREP (Preparation); PROC (Process);
 PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role
 in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

184 REFERENCES IN FILE CA (1907 TO DATE)
 184 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:431154
 REFERENCE 2: 140:313585
 REFERENCE 3: 140:294551
 REFERENCE 4: 140:253541
 REFERENCE 5: 140:235285
 REFERENCE 6: 140:119650
 REFERENCE 7: 140:93745
 REFERENCE 8: 140:59599
 REFERENCE 9: 139:261254
 REFERENCE 10: 139:149797

L12 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN

RN **431-03-8** REGISTRY

CN 2,3-Butanedione (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2,3-Butadione
 CN 2,3-Diketobutane
 CN 2,3-Dioxobutane
 CN Biacetyl
 CN Butanedione
 CN Diacetyl
 CN **Dimethyl diketone**
 CN Dimethylglyoxal
 CN NSC 8750
 FS 3D CONCORD
 DR 151677-70-2
 MF C4 H6 O2
 CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VTB

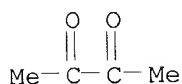
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Other Sources: DSL**, EINECS**, TSCA**

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DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
 CMBI (Combinatorial study); FORM (Formation, nonpreparative); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
 study); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant
 or reagent); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
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 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
 NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
 study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses)



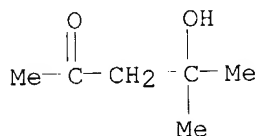
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6974 REFERENCES IN FILE CA (1907 TO DATE)
 38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 6987 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:6957
 REFERENCE 2: 141:6074
 REFERENCE 3: 141:5943
 REFERENCE 4: 141:5941
 REFERENCE 5: 141:5939
 REFERENCE 6: 141:3723
 REFERENCE 7: 140:429756
 REFERENCE 8: 140:423657
 REFERENCE 9: 140:422599
 REFERENCE 10: 140:422584

L12 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 123-42-2 REGISTRY
 CN 2-Pentanone, 4-hydroxy-4-methyl- (8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 2-Hydroxy-2-methyl-4-pentanone
 CN 2-Methyl-2-pentanol-4-one
 CN 2-Methyl-4-oxo-2-pentanol
 CN 4-Hydroxy-2-keto-4-methylpentane
 CN 4-Hydroxy-4-methyl-2-oxopentane
 CN 4-Hydroxy-4-methyl-2-pentanone
 CN 4-Methyl-4-hydroxy-2-pentanone
 CN Acetonyldimethylcarbinol

CN Diacetone alcohol
 CN **Diketone alcohol**
 CN NSC 9005
 CN Pyranton A
 CN Tyranton
 FS 3D CONCORD
 MF C6 H12 O2
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX,
 CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE,
 ENCOMPLIT, ENCOMPLIT2, ENCOMPAT, ENCOMPAT2, GMELIN*, HODOC*, HSDB*,
 IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*,
 PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
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 DT.CA Caplus document type: Book; Conference; Journal; Patent; Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
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 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
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 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: FORM (Formation,
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2197 REFERENCES IN FILE CA (1907 TO DATE)
 28 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2206 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:392447
 REFERENCE 2: 140:392446
 REFERENCE 3: 140:378033
 REFERENCE 4: 140:377621
 REFERENCE 5: 140:339681
 REFERENCE 6: 140:327765
 REFERENCE 7: 140:322996
 REFERENCE 8: 140:322475

REFERENCE 9: 140:320283

REFERENCE 10: 140:300134

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 FILE LAST UPDATED: 30 Jun 2004 (20040630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?
 L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI
 L3 SEL PLU=ON L1 1- CHEM : 210 TERMS
 L4 37613 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L5 54254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR ?DIKETONE?
 L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
 L7 1818 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L5
 L9 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?ANESTHE? OR ?HISTAMIN
 E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
 ?OINTMENT? OR URGENT? OR ?ITCH?)
 L10 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT (FLAVOR? OR CREAM(W) BUT
 TER OR FOOD#)
 L13 STR

O=C—C=O
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NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
 L15 SCR 1838
 L17 12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15

L18 117304 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
 L20 1606 SEA FILE=REGISTRY ABB=ON PLU=ON COLLOID? OR SUSPENSION? OR
 DISPERS?
 L21 1941897 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR COLLOID? OR SUSPENSION?
 OR DISPERS?
 L22 140971 SEA FILE=HCAPLUS ABB=ON PLU=ON L21(L)L6
 L29 6235 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L18
 L30 654 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND L22
 L31 482726 SEA FILE=HCAPLUS ABB=ON PLU=ON (?ANESTHE? OR ?HISTAMINE? OR
 ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT?
 OR URGENT? OR ?ITCH?)
 L32 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND L30
 L33 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 NOT L10
 L34 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 NOT (CREAM(W) BUTTER OR
 FLAVOR? OR FOOD#)

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L34 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:433119 HCAPLUS
 DOCUMENT NUMBER: 141:14233
 TITLE: Polyimide optical materials, their precursor
 solutions, and optical waveguide devices with low
 transmission loss
 INVENTOR(S): Kawamonzon, Yoshihiro; Nakayama, Toshio
 PATENT ASSIGNEE(S): Toshiba Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004149711	A2	20040527	JP 2002-318239	20021031
PRIORITY APPLN. INFO.:			JP 2002-318239	20021031
AB The optical materials, showing good heat and solvent resistance, comprise heterocyclic ring-containing polyimides preferably containing 5-40% F. The optical waveguide devices including the optical materials in core and/or cladding layers are useful for optical couplers, optical modulators, optical integrated circuits, etc.				
IT 996-98-5 7704-34-9, Sulfur , reactions RL: RCT (Reactant); RACT (Reactant or reagent) (heterocyclic ring-containing polyimide optical materials for optical waveguide devices with low transmission loss)				

L34 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:39379 HCAPLUS
 DOCUMENT NUMBER: 140:98075
 TITLE: Manufacturing of silicon carbide fibers essentially
 devoid of whiskers
 INVENTOR(S): Angier, Derek John; Rhodes, James F.; Rogers, William
 M.
 PATENT ASSIGNEE(S): Advanced Composite Materials Corporation, USA
 SOURCE: Brit. UK Pat. Appl., 42 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2390603	A1	20040114	GB 2003-16085	20030709
US 2004009112	A1	20040115	US 2002-191973	20020710
DE 10330818	A1	20040408	DE 2003-10330818	20030708
JP 2004036073	A2	20040205	JP 2003-272940	20030710
			US 2002-191973	A 20020710

PRIORITY APPLN. INFO.:

AB Silicon carbide fibers are produced by mixing discontinuous isotropic carbon fibers with a silica source and heating the mixture in an inert atmospheric at 1450-1800°. The silicon carbide fibers are essentially devoid of whiskers have excellent resistance to heating and excellent response to microwave energy, and can readily be formed into a ceramic medium employing conventional ceramic technol. The fibers also may be used for plastic and metal reinforcement. The mixture of carbon fibers and silica source may also contain two promoters (a) a compound or complex of Fe, Co or Ni and (b) a compound or complex of alkali metal or alkaline earth metal. Preferred promoters are ferrous sulfate and calcium oxalate.

IT 7704-34-9, Sulfur, occurrence
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
(making silicon carbide fibers essentially devoid of whiskers)

IT 563-72-4
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(promoter; making silicon carbide fibers essentially devoid of whiskers)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:472412 HCAPLUS
DOCUMENT NUMBER: 139:26677
TITLE: Method for reducing acne or improving skin tone
INVENTOR(S): Wiegand, Benjamin; McCulloch, Laura; Grossman, Rachel; Halas, Lynn
PATENT ASSIGNEE(S): Johnson & Johnson Consumer Companies, Inc., USA
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003049769	A2	20030619	WO 2002-US38747	20021204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002146469	A1	20021010	US 2001-12627	20011207
US 2002151527	A1	20021017	US 2001-17180	20011207
PRIORITY APPLN. INFO.:			US 2001-12627	A 20011207
			US 2001-17180	A 20011207

US 2000-256813P P 20001220

AB The present invention relates to a method for reducing the number and severity of acne lesions on the skin of a mammal. The method comprises the step of administering a sensory regimen in an amount effective to down-regulate the activity of the hypothalamus-pituitary-adrenal axis of the mammal in combination with the administration of an anti-acne composition comprising an effective amount of an anti-acne agent. Thus, a **cream** contained Laureth-4 0.4, HPMC 0.2, Carbomer-934P 1.75, disodium EDTA 0.2, NaOH 0.29, benzoyl peroxide (75%) 6.67, and water qs to 100%. The above formulation was tested in humans. The addition of fragrance to the benzoyl peroxide skin **cream** composition was perceived by the participants to significantly improve the performance of the product.

IT **127-17-3**, Pyruvic acid, biological studies **7704-34-9**,
Sulfur, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compsn. for reducing acne or improving skin tone)

L34 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:637534 HCAPLUS
 DOCUMENT NUMBER: 137:190733
 TITLE: Hydrogen peroxide-containing compositions for removal of acrochordon
 INVENTOR(S): Miller, Mickey; Ancira, Margaret
 PATENT ASSIGNEE(S): Physician's Choice of Arizona, Inc., USA
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064151	A1	20020822	WO 2002-US3530	20020208
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003008018	A1	20030109	US 2002-72829	20020208
EP 1365781	A1	20031203	EP 2002-720927	20020208
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004518715	T2	20040624	JP 2002-563944	20020208
PRIORITY APPLN. INFO.:			US 2001-267978P P	20010209
			WO 2002-US3530 W	20020208

AB The subject of the present invention is acrochordon removal and prevention utilizing safe dependable effective biocompatible treatments with no scarring, bleeding, twisting, yanking, choking, burning, freezing, shocking, **screaming** and hypo pigmentation or hyper pigmentation. Methods for acrochordon removal comprise application of high concns. of hydrogen peroxide (at least 23%). The composition further comprises a vitamin, an amino acid, a melanin inhibitor, an organic acid, a hormone, a sulfoxide, an alc., a fatty acid, a polyol, an amide, a surfactant, a terpene, etc. For example, the composition comprises 35% hydrogen peroxide, 0.5% L-ascorbic acid, 0.5% niacin, 0.5% glycine, 0.5% hydroquinone, 0.5% superoxide dismutase, 5% galacturonic acid, and 14% ethanol.

IT **127-17-3**, Pyruvic acid, biological studies **433-48-7**,

β -Fluoropyruvic acid **5699-58-1**, Acetylpyruvic acid

7704-34-9, Sulfur, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(hydrogen peroxide-containing compns. for removal of acrochordon)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:844153 HCAPLUS

DOCUMENT NUMBER: 133:366187

TITLE: Skin product comprising a retinyl ester and an
alkaline earth metal salt

PATENT ASSIGNEE(S): Oreal S. A., Fr.

SOURCE: Fr. Demande, 14 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2790667	A1	20000915	FR 1999-3047	19990310
FR 2790667	B1	20020614		

PRIORITY APPLN. INFO.: FR 1999-3047 19990310

AB Skin products comprising a retinyl ester and an alkaline earth metal salt, with no lipase, are disclosed. The alkaline earth metal salt activate the endogenous lipase which then hydrolyzes the retinyl ester or retinol. A **cream** contained polyglyceryl-2-sesquiisostearate 3, bees wax 4, mineral oil 30, magnesium stearate 0.2, aluminum stearate 0.1, retinyl propionate 0.5, calcium chloride 0.3, perfume 0.5, preservative 0.4, and water q.s. 100%. The **cream** decreases the skin wrinkles and pigmentations in a few weeks.

IT **338-70-5D**, salts, biological studies **7704-34-9**,

Sulfur, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(skin product comprising retinyl ester and alkaline earth metal salt)

L34 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:456076 HCAPLUS

DOCUMENT NUMBER: 127:166009

TITLE: Reduction of acid rain and ozone depletion precursors

INVENTOR(S): Oehr, Klaus Heinrich; Simons, Girard A.; Zhou, Jiahua

PATENT ASSIGNEE(S): Dynamotive Corp., Can.

SOURCE: U.S., 6 pp., Cont.-in-part of U.S. 5,458,083.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5645805	A	19970708	US 1995-491751	19950619
US 5645805	B1	20000111		
US 5458803	A	19951017	US 1993-130123	19930930
US 5458803	B1	19990803		

PRIORITY APPLN. INFO.: US 1993-130123 A2 19930930

AB A method for reducing acid emissions and ozone deletion precursors from a flue gas produced by the combustion of **sulfur**-or nitrogen-containing fuel or acid emissions and ozone deletion precursors from chemical plants is described. The method comprises introducing into a flue containing the gas,

an additive derived from the chemical reaction of pyrolysis liquor with an alkaline earth metal compound in the presence of an oxidant. This reaction produces a hydrophobic/hydrophilic mixture containing a plurality of thermolabile alkaline earth metal compds. These compds. are able to decompose at flue gas temperature to produce an alkaline compound able to react with **sulfur** dioxide and oxides of nitrogen to eliminate them from the gas.

- IT 7783-06-4P, Hydrogen sulfide, processes
RL: BYP (Byproduct); PEP (Physical, engineering or chemical process); REM (Removal or disposal); PREP (Preparation); PROC (Process)
(reduction of acid rain and ozone depletion precursors)
- IT 127-17-3, Pyruvic acid, formation (nonpreparative)
7704-34-9, **Sulfur**, formation (nonpreparative)
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(reduction of acid rain and ozone depletion precursors)
- IT 78-98-8, Methyl glyoxal
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(reduction of acid rain and ozone depletion precursors)
- IT 7446-09-5, **Sulfur** dioxide, occurrence
RL: POL (Pollutant); OCCU (Occurrence)
(reduction of acid rain and ozone depletion precursors)

L34 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:401524 HCAPLUS
DOCUMENT NUMBER: 125:137546
TITLE: Geovibrio ferrireducens, a phylogenetically distinct
dissimilatory Fe(III)-reducing bacterium
AUTHOR(S): Caccavo, Frank; Coates, John D.; Rossello-Mora, Ramon
A.; Ludwig, Wolfgang; Schleifer, Karl Heinz; Lovley,
Derek R.; McInerney, Michael J.
CORPORATE SOURCE: Center Biofilm Engineering, Montana State University,
Bozeman, MT, 59717, USA
SOURCE: Archives of Microbiology (1996), 165(6), 370-376
CODEN: AMICCW; ISSN: 0302-8933
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

- AB A new, phylogenetically distinct, dissimilatory Fe(III)-reducing bacterium was isolated from surface sediment of a hydrocarbon contaminated ditch. The isolate, designated strain PAL-1, was an obligately anaerobic, non-fermentative, motile, gram-neg. vibrio. PAL-1 grew in a defined medium with acetate as electron donor and ferric pyrophosphate, ferric oxyhydroxide, ferric citrate, Co(III)-EDTA, or elemental S as sole electron acceptor. PAL-1 also used Pro, H, lactate, propionate, succinate, fumarate, pyruvate, or yeast extract as electron donors for Fe(III) reduction. PAL-1 did not reduce O, Mn(IV), U(VI), Cr(VI), nitrate, sulfate, sulfite, or thiosulfate with acetate as the electron donor. Cell suspensions of PAL-1 exhibited dithionite-reduced minus air-oxidized difference spectra that were characteristic of c-type cytochromes. Anal. of the 16S rRNA gene sequence of PAL-1 showed that the strain is not related to any of the described metal-reducing bacteria in the Proteobacteria and, together with Flexistipes sinusarabici, forms a sep. line of descent within the Bacteria. Phenotypically and phylogenetically, strain PAL-1 differs from all other described bacteria and represents the type strain of a new genus and species, Geovibrio ferrireducens.
- IT 127-17-3, biological studies 7704-34-9, **Sulfur**
, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(dissimilatory Fe(III)-reducing bacterium Geovibrio ferrireducens)

L34 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:116847 HCAPLUS

DOCUMENT NUMBER: 120:116847
 TITLE: Biodegradable controlled release melt-spun delivery system
 INVENTOR(S): Fuisz, Richard C.
 PATENT ASSIGNEE(S): Fuisz Technologies, Ltd., USA
 SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9324154	A1	19931209	WO 1993-US5307	19930602
W: AU, CA, HU, JP, KR, PL, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5518730	A	19960521	US 1992-893238	19920603
AU 9344058	A1	19931230	AU 1993-44058	19930602
AU 665844	B2	19960118		
JP 07507548	T2	19950824	JP 1994-500877	19930602
EP 746342	A1	19961211	EP 1993-914373	19930602
EP 746342	B1	20020814		
R: BE, CH, DE, DK, FR, GB, IE, IT, LI, LU, NL, SE				
PRIORITY APPLN. INFO.:			US 1992-893238	A2 19920603
			WO 1993-US5307	A 19930602

AB Biodegradable controlled-release delivery systems using melt-spun biodegradable polymers as carriers for bio-effecting agents such as pharmaceutical actives are disclosed. Oral dose forms as well as implants are described. For example, polyglycolide was melt-spun in combination with various drugs such as vancomycin, gentamicin, tolmetin, diphenhydramine, ibuprofen, and insulin and controlled drug release was demonstrated.

IT **144-62-7D**, Oxalic acid, polymers
 RL: BIOL (Biological study)
 (controlled-release pharmaceuticals formed by flash-flow melt-spinning containing, as carrier)

IT **7704-34-9**, Sulfur, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (controlled-release pharmaceuticals formed by flash-flow melt-spinning containing, biodegradable polymers as carriers in)

L34 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:634827 HCAPLUS
 DOCUMENT NUMBER: 119:234827
 TITLE: Electrokinetic and magnetic properties of submicron barium ferrite (BaFe₁₂O₁₉) powder dispersions
 AUTHOR(S): Kaczmarek, W. A.; Radlinska, E. Z.; Ninham, B. W.
 CORPORATE SOURCE: Res. Sch. Phys. Sci. Eng., Aust. Natl. Univ., Canberra, 2601, Australia
 SOURCE: Materials Chemistry and Physics (1993), 35(1), 31-5
 CODEN: MCHPDR; ISSN: 0254-0584
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The morphol., electrokinetic, and magnetic properties of submicron Ba ferrite powder (suspended freely in water solns. of simple sodium salts) are studied. Ferrite particles in water solns. behave as colloidal particles, with the surface potential proportional to pH, and the point of zero charge at pH 5. A method for determining the magnetic **switching** field H_s of powder assemblies is described. The H_s depends on pH when the particles are immersed in 0.5 M Na salt solns., with the maximum observed value for NaNO₃ at pH 7.8.
 IT **113-24-6**

RL: PRP (Properties)
(electrokinetic and magnetic properties of submicron
dispersions of barium ferrite in aqueous)

L34 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:503334 HCAPLUS
DOCUMENT NUMBER: 119:103334
TITLE: Enhanced skin penetration system for improved topical
delivery of drugs
INVENTOR(S): Deckner, George Endel; Lombardo, Brian Scott
PATENT ASSIGNEE(S): Richardson-Vicks, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9307902	A1	19930429	WO 1992-US8741	19921013
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228064	A1	19930521	AU 1992-28064	19921013
AU 675211	B2	19970130		
EP 608320	A1	19940803	EP 1992-921755	19921013
EP 608320	B1	19980128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
HU 74560	A2	19970128	HU 1994-1107	19921013
AT 162725	E	19980215	AT 1992-921755	19921013
ES 2114569	T3	19980601	ES 1992-921755	19921013
CN 1072863	A	19930609	CN 1992-112390	19921016
IN 178157	A	19970308	IN 1992-DE1011	19921105
IN 181010	A	19980411	IN 1992-DE1013	19921105
NO 9401319	A	19940616	NO 1994-1319	19940413
FI 9401771	A	19940415	FI 1994-1771	19940415
US 5756118	A	19980526	US 1995-462258	19950605
US 5756119	A	19980526	US 1995-462376	19950605
US 5773023	A	19980630	US 1995-462710	19950605
US 5780049	A	19980714	US 1995-464991	19950605
US 5776485	A	19980707	US 1995-469701	19950606
US 5874095	A	19990223	US 1998-49367	19980327
PRIORITY APPLN. INFO.:			US 1991-778424	A 19911016
			US 1992-957752	B1 19921002
			WO 1992-US8741	A 19921013
			US 1993-111032	B1 19930824
			US 1994-228167	B1 19940415
			US 1995-390902	B3 19950216
			US 1995-462710	B3 19950605
AB	A topical composition with enhanced penetration through skin comprises an active agent and a nonionic polyacrylamide having a mol. weight of 1×10^6 - 3×10^7 . An analgesic composition contained Alc. SDA-40 40.0, ibuprofen 2.0, polyacrylamide/C13-14 isoparaffin/Laureth-7 3.0, and purified water 55.0%.			
IT	127-17-3, Pyruvic acid, biological studies 7704-34-9, Sulfur, biological studies			
	RL: BIOL (Biological study) (anti-acne topical compns. containing polyacrylamide and)			

L34 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:503333 HCAPLUS

DOCUMENT NUMBER: 119:103333
 TITLE: Enhanced skin penetration system for improved topical delivery of drugs
 INVENTOR(S): Deckner, George Endel; Lombardo, Brian Scott
 PATENT ASSIGNEE(S): Richardson-Vicks, Inc., USA
 SOURCE: PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9307903	A1	19930429	WO 1992-US8744	19921013
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228639	A1	19930521	AU 1992-28639	19921013
AU 675212	B2	19970130		
EP 608322	A1	19940803	EP 1992-921769	19921013
EP 608322	B1	19980722		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
JP 07500594	T2	19950119	JP 1993-507771	19921013
JP 3471354	B2	20031202		
HU 67046	A2	19950130	HU 1994-1106	19921013
BR 9206631	A	19951024	BR 1992-6631	19921013
AT 168563	E	19980815	AT 1992-921769	19921013
ES 2118834	T3	19981001	ES 1992-921769	19921013
CN 1072602	A	19930602	CN 1992-113328	19921016
CN 1050763	B	20000329		
US 6277892	B1	20010821	US 1994-191734	19940204
NO 9401317	A	19940616	NO 1994-1317	19940413
FI 9401770	A	19940415	FI 1994-1770	19940415
HK 1013002	A1	20000623	HK 1998-114300	19981221
PRIORITY APPLN. INFO.:			US 1991-778422	A 19911016
			US 1992-948391	A 19920925
			WO 1992-US8744	A 19921013
			US 1993-59001	B1 19930506
AB	A topical composition with enhanced penetration through skin comprises an active agent and a high-mol.-weight crosslinked cationic polymer, such as dialkylaminoalkyl (meth)acrylate polymers. An anti-acne composition contained Alc. SDA-40 40.0, Polyquaternium-32 and mineral oil 4.0, salicylic acid 2.0, and purified water 54.0%.			
IT	127-17-3, Pyruvic acid, biological studies 7704-34-9, Sulfur, biological studies RL: BIOL (Biological study) (anti-acne topical compns. containing dialkylaminoalkyl acrylate polymers and)			
L34	ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN			
ACCESSION NUMBER:	1993:434327 HCAPLUS			
DOCUMENT NUMBER:	119:34327			
TITLE:	Low-pH aqueous gels containing nonionic polyacrylamide derivatives			
INVENTOR(S):	Deckner, George Endel; Lombardo, Brian Scott			
PATENT ASSIGNEE(S):	Richardson-Vicks, Inc., USA			
SOURCE:	PCT Int. Appl., 20 pp. CODEN: PIXXD2			
DOCUMENT TYPE:	Patent			
LANGUAGE:	English			
FAMILY ACC. NUM. COUNT:	1			

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9307856	A1	19930429	WO 1992-US8743	19921013
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228000	A1	19930521	AU 1992-28000	19921013
AU 675210	B2	19970130		
EP 608353	A1	19940803	EP 1992-922437	19921013
EP 608353	B1	19960131		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
JP 07500593	T2	19950119	JP 1992-507770	19921013
HU 66957	A2	19950130	HU 1994-1105	19921013
BR 9206630	A	19950425	BR 1992-6630	19921013
AT 133560	E	19960215	AT 1992-922437	19921013
ES 2083197	T3	19960401	ES 1992-922437	19921013
CA 2119636	C	19980623	CA 1992-2119636	19921013
CN 1072843	A	19930609	CN 1992-113394	19921016
CN 1050283	B	20000315		
NO 9401318	A	19940615	NO 1994-1318	19940413
FI 9401769	A	19940415	FI 1994-1769	19940415
US 5707635	A	19980113	US 1994-249093	19940525
PRIORITY APPLN. INFO.:				
			US 1991-778423	A 19911016
			US 1992-931553	B1 19920818
			WO 1992-US8743	A 19921013
			US 1993-121661	B1 19930915
AB	An aqueous gel comprising 0.05-20% of acrylamide derivative polymers (mol. weight 1+106 - 3+107) provides an improved skin-feel, excellent moisturizing, and absorption characteristics. An anti-acne composition contained Alc. SD-40 40.0, Sepigel (made of polyacrylamide, C13-14-isoparaffin, and laureth-7) 4.0, salicylic acid 2.0, and purified water 54%.			
IT	127-17-3, Pyruvic acid, biological studies 7704-34-9, Sulfur, biological studies RL: BIOL (Biological study) (anti-acne aqueous gels containing polyacrylamide and)			
L34	ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN			
ACCESSION NUMBER:	1989:10914 HCAPLUS			
DOCUMENT NUMBER:	110:10914			
TITLE:	Partial oxidation of sulfur-containing solid carbonaceous fuel			
INVENTOR(S):	Najjar, Mitru S.; Corbeels, Roger J.			
PATENT ASSIGNEE(S):	Texaco Inc., USA			
SOURCE:	U.S., 5 pp. CODEN: USXXAM			
DOCUMENT TYPE:	Patent			
LANGUAGE:	English			
FAMILY ACC. NUM. COUNT:	7			
PATENT INFORMATION:				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4774021	A	19880927	US 1987-32157	19870327
US 4876031	A	19891024	US 1988-161581	19880229
US 4952380	A	19900828	US 1988-179931	19880411
US 4889699	A	19891226	US 1988-208933	19880620
US 4851152	A	19890725	US 1988-242588	19880912
US 4857229	A	19890815	US 1988-258947	19881017
US 4925644	A	19900515	US 1988-276735	19881128

PRIORITY APPLN. INFO.: US 1987-32157 19870327
 US 1987-51982 19870519
 US 1987-62018 19870615
 US 1987-100673 19870924

AB A process is described for simultaneous partial oxidation-
desulfurization of S- and silicate-containing solid carbonaceous fuel
 (e.g., coal and petroleum coke) for the production of (H₂ + CO) gas mixts.
 containing <0.05 volume% of (H₂S + COS). In the process, an aqueous slurry of the
 solid carbonaceous fuel and a Cu-containing compound are reacted by partial
 oxidation in a vertical refractory-lined, unobstructed, down-flowing gas
 generator with a controlled amount of free-O containing gas and, optionally a
 temperature moderator so that the equilibrium O partial pressure is <10⁻⁶
 atmospheric The

O-C atomic ratio is 0.5-2.0:1; the H₂O-solid fuel weight ratio is 0.2-0.7:1.
 The total mols of Cu in the reaction zone is at least equal to .apprx.1.0
 times the mols of S in the solid fuel. The partial oxidation and
desulfurization reactions take place simultaneously at a temperature
 which produces fly-ash or molten slag at an increased thermal efficiency.
 At least .apprx.90 weight% of the S in the solid fuel in the reaction zone is
 converted into Cu oxysulfide particulate matter which leaves the reaction
 zone along with the fly-ash or molten slag entrained in the hot raw
 effluent gas stream. The H₂O-H₂ mol ratio in the reaction zone is
 0.4-3.0:1. The hot raw effluent gas is cooled and cleaned without contact
 with water.

IT **7439-96-5**, Manganese, uses and miscellaneous

RL: USES (Uses)

(additives containing copper and, in simultaneous partial oxidation-
desulfurization of solid carbonaceous fuels, for manufacture of
 synthesis gas)

IT **144-62-7D**, Oxalic acid, copper salts

RL: USES (Uses)

(additives, in simultaneous partial oxidation-**desulfurization** of
 solid carbonaceous fuels, for synthesis gas manufacture)

IT **7783-06-4**, Hydrogen sulfide, uses and miscellaneous

RL: REM (Removal or disposal); PROC (Process)

(removal of, in simultaneous partial oxidation-**desulfurization**
 of solid carbonaceous fuels, for manufacture of synthesis gas)

L34 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:616035 HCAPLUS

DOCUMENT NUMBER: 109:216035

TITLE: Hydroxycarboxylic acids as additives enhancing topical
 actions of therapeutic agents

INVENTOR(S): Van Scott, Eugene J.

PATENT ASSIGNEE(S): Yu, Ruey J., USA

SOURCE: Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 273202	A2	19880706	EP 1987-117405	19871125
EP 273202	A3	19900606		
EP 273202	B1	19950621		
R: DE, ES, FR, GB, IT				
AU 8779986	A1	19880623	AU 1987-79986	19871021
AU 618517	B2	19920102		
CA 1324077	A1	19931109	CA 1987-549964	19871022
JP 63166837	A2	19880711	JP 1987-280275	19871105
JP 2533339	B2	19960911		

EP 599819	A2	19940601	EP 1994-102151	19871125
EP 599819	A3	19940727		
EP 599819	B1	19970402		
R: DE, ES, FR, GB, IT				
ES 2074978	T3	19951001	ES 1987-117405	19871125
EP 770399	A2	19970502	EP 1997-100470	19871125
R: DE, ES, FR, GB, IT				
ES 2103506	T3	19970916	ES 1994-102151	19871125
JP 3016588	B2	20000306	JP 1991-505539	19910121
AU 9213943	A1	19920528	AU 1992-13943	19920331
AU 654850	B2	19941124		
US 5385938	A	19950131	US 1992-925877	19920807
US 5385938	B1	19920807		
CA 1340120	A1	19981110	CA 1992-616460	19920810
US 5091171	B1	19950926	US 1992-90002911	19921217
US 5665776	A	19970909	US 1993-8223	19930122
US 5389677	A	19950214	US 1993-89101	19930712
US 5389677	B1	19970715		
US 5702688	A	19971230	US 1993-135841	19931007
US 5422370	A	19950606	US 1994-179189	19940110
US 5422370	B1	19970715		
US 5470880	A	19951128	US 1994-179190	19940110
US 5550154	A	19960827	US 1995-463235	19950605
US 5561159	A	19961001	US 1995-463062	19950605
US 5561155	A	19961001	US 1995-464071	19950605
US 5589505	A	19961231	US 1995-463724	19950605
US 5591774	A	19970107	US 1995-463063	19950605
US 5668177	A	19970916	US 1995-464500	19950605
US 5670541	A	19970923	US 1995-464475	19950605
US 5550158	A	19960827	US 1995-471530	19950606
US 5554651	A	19960910	US 1995-467894	19950606
US 5556882	A	19960917	US 1995-467530	19950606
US 5561156	A	19961001	US 1995-470433	19950606
US 5561153	A	19961001	US 1995-470435	19950606
US 5565487	A	19961015	US 1995-471528	19950606
US 5571841	A	19961105	US 1995-470434	19950606
US 5574067	A	19961112	US 1995-467001	19950606
US 5578644	A	19961126	US 1995-471518	19950606
US 5580902	A	19961203	US 1995-465699	19950606
US 5583156	A	19961210	US 1995-467895	19950606
US 5599843	A	19970204	US 1995-471529	19950606
US 5612376	A	19970318	US 1995-465703	19950606
US 5637615	A	19970610	US 1995-467153	19950606
US 5643961	A	19970701	US 1995-466737	19950606
US 5643962	A	19970701	US 1995-466740	19950606
US 5643952	A	19970701	US 1995-466770	19950606
US 5643953	A	19970701	US 1995-467156	19950606
US 5643963	A	19970701	US 1995-471523	19950606
US 5648395	A	19970715	US 1995-466739	19950606
US 5648391	A	19970715	US 1995-469812	19950606
US 5648388	A	19970715	US 1995-471511	19950606
US 5650436	A	19970722	US 1995-467134	19950606
US 5650437	A	19970722	US 1995-470060	19950606
US 5650440	A	19970722	US 1995-471513	19950606
US 5652267	A	19970729	US 1995-469814	19950606
US 5654340	A	19970805	US 1995-467989	19950606
US 5656665	A	19970812	US 1995-466771	19950606
US 5656666	A	19970812	US 1995-470829	19950606
US 5670542	A	19970923	US 1995-465700	19950606
US 5670543	A	19970923	US 1995-471521	19950606
US 5674899	A	19971007	US 1995-465704	19950606
US 5674903	A	19971007	US 1995-468079	19950606
US 5677339	A	19971014	US 1995-466820	19950606

US 5677340	A	19971014	US 1995-468077	19950606
US 5716992	A	19980210	US 1995-469811	19950606
US 5827882	A	19981027	US 1995-465695	19950606
US 5554652	A	19960910	US 1995-487685	19950607
US 5554654	A	19960910	US 1995-487692	19950607
US 5561157	A	19961001	US 1995-472318	19950607
US 5571837	A	19961105	US 1995-475685	19950607
US 5621006	A	19970415	US 1995-472314	19950607
US 5654336	A	19970805	US 1995-483328	19950607
US 5681853	A	19971028	US 1995-472317	19950607
US 5684044	A	19971104	US 1995-472315	19950607
US 5690967	A	19971125	US 1995-472310	19950607
US 5691378	A	19971125	US 1995-487684	19950607
CA 1339706	A1	19980310	CA 1995-617036	19951031
US 5889054	A	19990330	US 1997-925063	19970908
US 5962526	A	19991005	US 1997-926030	19970909
US 5856357	A	19990105	US 1997-937008	19970924
US 6060512	A	20000509	US 1998-185608	19981104
US 6051609	A	20000418	US 1998-222997	19981230
US 6384079	B1	20020507	US 1999-224949	19990104
US 6191167	B1	20010220	US 1999-255702	19990223
US 2003083380	A1	20030501	US 2000-729981	20001206
US 2001016604	A1	20010823	US 2001-774882	20010201
US 2003017130	A1	20030123	US 2002-71345	20020208

PRIORITY APPLN. INFO.:

US 1986-945680	A	19861223
CA 1987-549964	A3	19871022
EP 1987-117405	A3	19871125
EP 1994-102151	A3	19871125
US 1989-393749	A3	19890815
US 1990-469738	B1	19900119
US 1990-467958	A	19900122
WO 1991-US412	W	19910121
US 1991-683437	B1	19910410
US 1991-812858	B1	19911223
US 1992-840149	B1	19920224
CA 1992-616460	A3	19920810
US 1992-936863	B1	19920827
US 1993-8112	A3	19930122
US 1993-8223	A3	19930122
US 1993-89101	A1	19930712
US 1993-117559	B1	19930907
US 1993-135841	A1	19931007
US 1994-179190	A1	19940110
US 1994-359939	A1	19941220
US 1995-478524	A1	19950607
US 1995-487684	A1	19950607
US 1997-926030	A1	19970909
US 1997-998864	A1	19971229
US 1997-998871	A3	19971229
US 1998-185608	A1	19981104
US 1998-222995	B1	19981230
US 1998-222997	A1	19981230
US 2000-510368	B1	20000222
US 2000-513225	B1	20000225
US 2001-774822	A1	20010130

OTHER SOURCE(S): MARPAT 109:216035

AB Hydroxycarboxylic acids and related ketocarboxylic acids, esters, lactones or salts enhance the therapeutic effect of topical drugs and cosmetics. Addition of 10% lactic acid strongly improved the antipsoriatic effect of topically-applied 3% thionicotinamide, in humans. A composition for prevention and treatment of oily skin comprised erythromycin 2 g aleuritic acid 2 g, EtOH 50 mL, water 40 mL and propylene glycol 6 mL.

IT 127-17-3, Pyruvic acid, biological studies 298-12-4,

Formylformic acid 600-22-6, Methylpyruvate 617-35-6,
Ethylpyruvate 922-68-9 923-11-5, Isopropylpyruvate
924-44-7, Ethyl formylformate 925-61-1 1113-60-6
, Hydroxypyruvic acid 3913-50-6 20279-43-0

RL: BIOL (Biological study)

(topical drug activity enhancement by)

IT 144-82-1, Sulfamethizole 7704-34-9, Sulfur,
biological studies

RL: BIOL (Biological study)

(topical drug containing, hydroxycarboxylic acids as activity enhancers
for)

L34 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1984:613721 HCAPLUS

DOCUMENT NUMBER: 101:213721

TITLE: Study of the properties of **pitch** coke
modified by chemically active additives

AUTHOR(S): Kulakov, V. V.; Neproshin, E. I.; Fedeneva, E. N.

CORPORATE SOURCE: USSR

SOURCE: Khimiya Tverdogo Topliva (Moscow, Russian Federation)

(1984), (5), 132-4

CODEN: KTVTBY; ISSN: 0023-1177

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The effect was studied of the addition of 1-10% S, (NH₄)₂S₂O₈, Fe oxalate (I)
[15843-42-2], hydroquinone [123-31-9], AlCl₃, or B to coal-tar
pitch on the yield, mech. strength, and reactivity of cokes prepared
from this **pitch**. Thus, addition of B had no effect on the coke
yield but increased its strength and decreased its activity. The best
overall coke properties were obtained when the **pitch** contained
1% I.

IT 7704-34-9, properties 15843-42-2

RL: PRP (Properties)

(coal-tar **pitch** containing, properties and yield of cokes from)

L34 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1979:528058 HCAPLUS

DOCUMENT NUMBER: 91:128058

TITLE: Reagent hazards

AUTHOR(S): Anon.

CORPORATE SOURCE: Japan

SOURCE: A&R (1978), 16(10), 458-63

CODEN: ARRRDM; ISSN: 0386-1902

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review with 3 refs.

IT 144-62-7, uses and miscellaneous 7446-09-5, biological
studies 7704-34-9, biological studies 7783-06-4, uses
and miscellaneous 8014-95-7 10545-99-0

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)

(health hazards and safety in handling of)

L34 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1954:74910 HCAPLUS

DOCUMENT NUMBER: 48:74910

ORIGINAL REFERENCE NO.: 48:13238c-f

TITLE: Retardation of oxidation of rosin

AUTHOR(S): Mitra, S. P.

CORPORATE SOURCE: Univ. Allahabad

SOURCE: Proceedings of the National Academy of Sciences, India
(1951), 20A, 132-9

CODEN: NAIPAQ; ISSN: 0369-3236

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB The retarding effect of a number of antioxidants on the auto-oxidation of molten rosin at 200° was determined. The concentration of antioxidant was 0.001M and the rate of air flow was 738-44 cc./min. The effectiveness of the antioxidants after 10 hrs. decreased in the order: gallic acid (I), vanillin, o-nitroaniline, pyrogallol, guaiacol, phenol, metol, thymol, o-aminophenol, Na tartarate, resorcinol, hydroquinone, o-nitrophenol, Na citrate, salicylic acid, 2-naphthol, Na2SO3, BzH, anthraquinone, S, phloroglucinol, tannic acid, glucose, anthracene, H2SO4, 1-naphthol (II), cane sugar (III), oxalic acid (IV), phenanthrene (V), and iodine. II, III, IV, V, and iodine gave a smaller amount of oxidized product after 2 hrs. than the control containing no antioxidant and a larger amount after 10 hrs. S gave more oxidized product after 2 hrs. and less after 10 hrs. than the control. The rate of oxidation in the presence of I was increased by increasing the rate of air flow, raising the temperature, or decreasing the concentration of I. It is postulated that the effectiveness of an antioxidant B is dependent upon its ability to form a nonreactive compound AOB with the autocatalytic agent AO formed by the action of O on the substance A.

IT 144-62-7, Oxalic acid 7704-34-9, Sulfur
(as antioxidant for rosin)

=> select hit rn l34 1-17
E1 THROUGH E27 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 12:16:33 ON 01 JUL 2004
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DICTIONARY FILE UPDATES: 30 JUN 2004 HIGHEST RN 701907-96-2

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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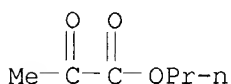
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L35 27 S E1-E27
L36 20 S L35 AND L17

=> d ide can l36 1-20

L36 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN 20279-43-0 REGISTRY

CN Propanoic acid, 2-oxo-, propyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Pyruvic acid, propyl ester (7CI, 8CI)
 OTHER NAMES:
 CN Propyl 2-oxopropionate
 CN Propyl pyruvate
 FS 3D CONCORD
 MF C6 H10 O3
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA Caplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RL.NP Roles from non-patents: ANST (Analytical study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent)



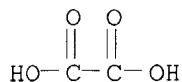
****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

37 REFERENCES IN FILE CA (1907 TO DATE)
 37 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:341779
 REFERENCE 2: 139:333129
 REFERENCE 3: 138:90080
 REFERENCE 4: 138:20906
 REFERENCE 5: 137:109059
 REFERENCE 6: 134:326021
 REFERENCE 7: 134:326020
 REFERENCE 8: 134:285591
 REFERENCE 9: 133:79034
 REFERENCE 10: 131:144323

L36 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN **15843-42-2** REGISTRY
 CN Ethanedioic acid, iron salt (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Iron oxalate (6CI, 7CI)
 CN Oxalic acid, iron salt (8CI)
 DR 17856-16-5
 MF C2 H2 O4 . x Fe
 LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, PIRA, TOXCENTER, TULSA, USPAT2, USPATFULL
 (*File contains numerically searchable property data)

Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Conference; Journal; Patent; Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
 PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
 reagent); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: USES (Uses)
 RL.NP Roles from non-patents: BIOL (Biological study); FORM (Formation,
 nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process);
 PRP (Properties); RACT (Reactant or reagent); USES (Uses)
 RLD.NP Roles for non-specific derivatives from non-patents: FORM (Formation,
 nonpreparative); PREP (Preparation); PROC (Process); USES (Uses)
 CRN (144-62-7)



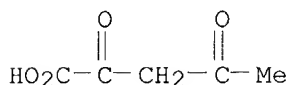
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148 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 148 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 45 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:426223
 REFERENCE 2: 140:323985
 REFERENCE 3: 140:99607
 REFERENCE 4: 139:373432
 REFERENCE 5: 139:201747
 REFERENCE 6: 139:102446
 REFERENCE 7: 138:398400
 REFERENCE 8: 138:261847
 REFERENCE 9: 138:90184
 REFERENCE 10: 137:188515

L36 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 5699-58-1 REGISTRY
 CN Pentanoic acid, 2,4-dioxo- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Valeric acid, 2,4-dioxo- (6CI, 8CI)
 OTHER NAMES:
 CN 2,4-Dioxopentanoic acid
 CN Acetoneoxalic acid
 CN Acetopyruvic acid
 CN Acetylpyruvic acid
 FS 3D CONCORD
 MF C5 H6 O4

CI COM
 LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
 CHEMLIST, HODOC*, MEDLINE, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Conference; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); RACT (Reactant or
 reagent); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: RACT (Reactant or
 reagent)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological
 study)



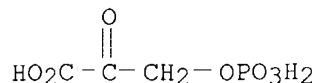
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

50 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 50 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:195305
 REFERENCE 2: 140:177189
 REFERENCE 3: 140:156740
 REFERENCE 4: 139:17115
 REFERENCE 5: 138:217259
 REFERENCE 6: 137:190733
 REFERENCE 7: 134:188159
 REFERENCE 8: 131:319458
 REFERENCE 9: 131:296961
 REFERENCE 10: 127:307382

L36 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 3913-50-6 REGISTRY
 CN Propanoic acid, 2-oxo-3-(phosphonooxy)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Pyruvic acid, hydroxy-, di-H phosphate (7CI)
 CN Pyruvic acid, hydroxy-, dihydrogen phosphate (8CI)
 CN Pyruvic acid, hydroxy-, phosphate (6CI)
 OTHER NAMES:
 CN Phosphohydroxypyruvic acid
 FS 3D CONCORD

MF C3 H5 O7 P
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, MEDLINE,
 TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA CApplus document type: Conference; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); FORM (Formation,
 nonpreparative)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant
 or reagent); NORL (No role in record)



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

40 REFERENCES IN FILE CA (1907 TO DATE)
 40 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:314428
 REFERENCE 2: 127:30825
 REFERENCE 3: 124:80279
 REFERENCE 4: 115:178807
 REFERENCE 5: 115:44949
 REFERENCE 6: 115:25308
 REFERENCE 7: 114:3531
 REFERENCE 8: 111:73667
 REFERENCE 9: 109:216035
 REFERENCE 10: 108:163938

L36 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN **1113-60-6** REGISTRY
 CN Propanoic acid, 3-hydroxy-2-oxo- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:

CN Pyruvic acid, hydroxy- (6CI, 8CI)
 OTHER NAMES:

CN β -Hydroxypyruvic acid
 CN 2-Oxo-3-hydroxypropionic acid
 CN 3-Hydroxypyruvic acid
 CN Hydroxypyruvic acid

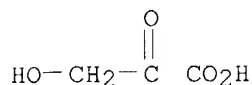
FS 3D CONCORD

MF C3 H4 O4

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX,
 CHEMLIST, CSChem, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,
 NAPRALERT, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)

DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PRP (Properties)



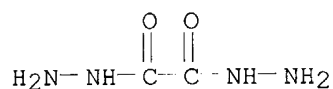
****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

420 REFERENCES IN FILE CA (1907 TO DATE)
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 421 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 46 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:372074
 REFERENCE 2: 140:267345
 REFERENCE 3: 140:265629
 REFERENCE 4: 140:231427
 REFERENCE 5: 140:231372
 REFERENCE 6: 140:157478
 REFERENCE 7: 140:141611
 REFERENCE 8: 140:4124
 REFERENCE 9: 139:396127
 REFERENCE 10: 139:175798

L36 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN **996-98-5** REGISTRY
 CN Ethanedioic acid, dihydrazide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Oxalic acid, dihydrazide (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN NSC 264
 CN Oxalldihydrazide
 CN Oxalhydrazide
 CN Oxalic acid bishydrazide
 CN Oxalic acid hydrazide
 CN Oxalic dihydrazide
 CN Oxaloyl dihydrazide
 CN Oxaloylhydrazine
 CN Oxalyl dihydrazide
 CN Oxalyl hydrazide

FS 3D CONCORD
 DR 3011-40-3
 MF C2 H6 N4 O2
 CI COM
 LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report
 RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



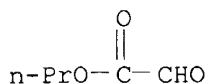
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365 REFERENCES IN FILE CA (1907 TO DATE)
 14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 366 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 38 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:14233
 REFERENCE 2: 140:425095
 REFERENCE 3: 140:329404
 REFERENCE 4: 140:287329
 REFERENCE 5: 139:402862
 REFERENCE 6: 139:268017
 REFERENCE 7: 139:166904
 REFERENCE 8: 139:22823
 REFERENCE 9: 139:8799
 REFERENCE 10: 138:411096

L36 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 925-61-1 REGISTRY
 CN Acetic acid, oxo-, propyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Glyoxylic acid, propyl ester (7CI, 8CI)

FS 3D CONCORD
 MF C5 H8 O3
 LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL
 DT.CA Caplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT
 (Reactant or reagent); NORL (No role in record)
 RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PREP
 (Preparation); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1907 TO DATE)
 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:35307
 REFERENCE 2: 139:323269
 REFERENCE 3: 139:52881
 REFERENCE 4: 136:53424
 REFERENCE 5: 133:135312
 REFERENCE 6: 131:317794
 REFERENCE 7: 126:199277
 REFERENCE 8: 109:216035
 REFERENCE 9: 62:58560
 REFERENCE 10: 62:58559

L36 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 924-44-7 REGISTRY
 CN Acetic acid, oxo-, ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glyoxylic acid, ethyl ester (6CI, 7CI, 8CI)

OTHER NAMES:

CN Ethyl glyoxylate

CN Ethyl oxoacetate

CN NSC 49206

CN Oxoacetic acid ethyl ester

FS 3D CONCORD

MF C4 H6 O3

CI COM

LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CSCHM, IFICDB, IFIPAT, IFIUDB, SYNTHLINE,
 TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent

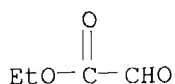
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC

(Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); RACT (Reactant or reagent)



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

639 REFERENCES IN FILE CA (1907 TO DATE)
 6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 645 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:7323

REFERENCE 2: 141:7098

REFERENCE 3: 140:433476

REFERENCE 4: 140:423439

REFERENCE 5: 140:423430

REFERENCE 6: 140:406826

REFERENCE 7: 140:391493

REFERENCE 8: 140:391297

REFERENCE 9: 140:357038

REFERENCE 10: 140:339203

L36 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN **923-11-5** REGISTRY

CN Propanoic acid, 2-oxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pyruvic acid, isopropyl ester (7CI, 8CI)

OTHER NAMES:

CN Isopropyl pyruvate

FS 3D CONCORD

MF C6 H10 O3

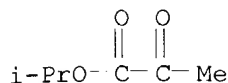
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

DT.CA CAplus document type: Conference; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RL.NP Roles from non-patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)

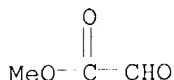


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

49 REFERENCES IN FILE CA (1907 TO DATE)
49 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:187391
REFERENCE 2: 138:90080
REFERENCE 3: 137:320306
REFERENCE 4: 137:257698
REFERENCE 5: 137:109059
REFERENCE 6: 135:247013
REFERENCE 7: 135:210607
REFERENCE 8: 135:195246
REFERENCE 9: 134:326021
REFERENCE 10: 134:326020

L36 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **922-68-9** REGISTRY
CN Acetic acid, oxo-, methyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glyoxylic acid, methyl ester (7CI, 8CI)
OTHER NAMES:
CN Methyl glyoxylate
CN Methyl oxoacetate
CN Oxoacetic acid methyl ester
FS 3D CONCORD
MF C3 H4 O3
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
CHEMINFORMRX, CHEMLIST, CSCHM, IFICDB, IFIPAT, IFIUDB, RTECS*,
SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC
(Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in
record)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
study); FORM (Formation, nonpreparative); PREP (Preparation); PROC
(Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

446 REFERENCES IN FILE CA (1907 TO DATE)
 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 447 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:303317
 REFERENCE 2: 140:287568
 REFERENCE 3: 140:253384
 REFERENCE 4: 140:236089
 REFERENCE 5: 140:181288
 REFERENCE 6: 140:111435
 REFERENCE 7: 140:95896
 REFERENCE 8: 140:76931
 REFERENCE 9: 140:35307
 REFERENCE 10: 140:16701

L36 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN 617-35-6 REGISTRY

CN Propanoic acid, 2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pyruvic acid, ethyl ester (6CI, 7CI, 8CI)

OTHER NAMES:

CN 2-Oxopropanoic acid ethyl ester

CN Ethyl 2-oxopropanoate

CN Ethyl 2-oxopropionate

CN Ethyl methylglyoxylate

CN Ethyl pyruvate

CN NSC 48386

FS 3D CONCORD

MF C5 H8 O3

CI COM

LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL

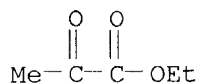
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Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report
 RL.P Roles from patents: BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in

record)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 RL.NP Roles for non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1425 REFERENCES IN FILE CA (1907 TO DATE)
 6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1430 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 44 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:6895
 REFERENCE 2: 141:6718
 REFERENCE 3: 140:425209
 REFERENCE 4: 140:357670
 REFERENCE 5: 140:357015
 REFERENCE 6: 140:339635
 REFERENCE 7: 140:338102
 REFERENCE 8: 140:333992
 REFERENCE 9: 140:323150
 REFERENCE 10: 140:323124

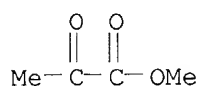
L36 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 600-22-6 REGISTRY
 CN Propanoic acid, 2-oxo-, methyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Pyruvic acid, methyl ester (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN 2-Oxopropanoic acid methyl ester
 CN Methyl 2-oxopropanoate
 CN Methyl 2-oxopropionate
 CN Methyl acetoformate
 CN Methyl pyruvate
 CN Methylglyoxylic acid methyl ester
 CN NSC 65430
 FS 3D CONCORD
 MF C4 H6 O3
 CI COM
 LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSChem, DETHERM*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: RACT (Reactant or reagent)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: FORM (Formation, nonpreparative); PROC (Process); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

827 REFERENCES IN FILE CA (1907 TO DATE)
 8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 830 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:406383
 REFERENCE 2: 140:359317
 REFERENCE 3: 140:356933
 REFERENCE 4: 140:339342
 REFERENCE 5: 140:338950
 REFERENCE 6: 140:338874
 REFERENCE 7: 140:321385
 REFERENCE 8: 140:321004
 REFERENCE 9: 140:299427
 REFERENCE 10: 140:276769

L36 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN **563-72-4** REGISTRY

CN Ethanedioic acid, calcium salt (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxalic acid, calcium salt (1:1) (8CI)

OTHER NAMES:

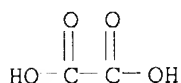
CN Calcium oxalate (1:1)

MF C2 H2 O4 . Ca

CI COM

LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CSCHM, DETHERM*, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, NIOSHTIC, SPECINFO,

TOXCENTER, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent;
 Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
 FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological
 study); PROC (Process); PRP (Properties); RACT (Reactant or reagent)
 CRN (144-62-7)



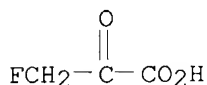
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2807 REFERENCES IN FILE CA (1907 TO DATE)
 7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2810 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:422492
 REFERENCE 2: 140:419106
 REFERENCE 3: 140:393165
 REFERENCE 4: 140:390871
 REFERENCE 5: 140:389791
 REFERENCE 6: 140:388643
 REFERENCE 7: 140:385525
 REFERENCE 8: 140:376903
 REFERENCE 9: 140:376457
 REFERENCE 10: 140:373375

L36 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 433-48-7 REGISTRY
 CN Propanoic acid, 3-fluoro-2-oxo- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Pyruvic acid, fluoro- (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN β-Fluoropyruvic acid
 CN 3-Fluoropyruvic acid

CN Fluoropyruvic acid
 CN NSC 21734
 FS 3D CONCORD
 MF C3 H3 F O3
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CSCHEM, IFICDB,
 IFIPAT, IFIUDB, MEDLINE, RTECS*, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA CAPLUS document type: Conference; Dissertation; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC
 (Process); RACT (Reactant or reagent); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
 study); PROC (Process); RACT (Reactant or reagent)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological
 study)



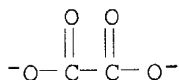
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

121 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 121 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:291180
 REFERENCE 2: 139:226463
 REFERENCE 3: 138:362652
 REFERENCE 4: 138:183027
 REFERENCE 5: 138:69813
 REFERENCE 6: 137:190733
 REFERENCE 7: 136:397729
 REFERENCE 8: 136:354256
 REFERENCE 9: 136:231340
 REFERENCE 10: 136:215515

L36 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 338-70-5 REGISTRY
 CN Ethanedioic acid, ion(2-) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Oxalic acid, ion(2-) (8CI)
 OTHER NAMES:
 CN Oxalate (C2O42-)
 CN Oxalate dianion
 CN Oxalate ion (C2O42-)
 CN Oxalate ion(2-)

CN Oxalate(2-)
 FS 3D CONCORD
 MF C2 O4
 CI COM
 LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CSNB,
 GMELIN*, IFICDB, IFIPAT, IFIUDB, NIOSHTIC, SPECINFO, TOXCENTER, USPAT2,
 USPATFULL
 (*File contains numerically searchable property data)
 DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
 FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
 study); PROC (Process); RACT (Reactant or reagent); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
 study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC
 (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);
 PRP (Properties); RACT (Reactant or reagent); USES (Uses)

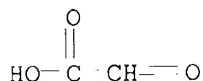


1574 REFERENCES IN FILE CA (1907 TO DATE)
 33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1579 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:11143
 REFERENCE 2: 141:11107
 REFERENCE 3: 140:429747
 REFERENCE 4: 140:428482
 REFERENCE 5: 140:411749
 REFERENCE 6: 140:409628
 REFERENCE 7: 140:402585
 REFERENCE 8: 140:395128
 REFERENCE 9: 140:384733
 REFERENCE 10: 140:364510

L36 ANSWER 16 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 298-12-4 REGISTRY
 CN Acetic acid, oxo- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Glyoxylic acid (8CI)
 OTHER NAMES:
 CN α -Ketoacetic acid
 CN Formylformic acid
 CN Glyoxalic acid

CN NSC 27785
 CN Oxalaldehydic acid
 CN Oxoacetic acid
 CN Oxoethanoic acid
 FS 3D CONCORD
 MF C2 H2 O3
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4641 REFERENCES IN FILE CA (1907 TO DATE)
 158 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4649 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:11555
 REFERENCE 2: 141:8822
 REFERENCE 3: 141:6622
 REFERENCE 4: 141:2744
 REFERENCE 5: 140:433196
 REFERENCE 6: 140:425184
 REFERENCE 7: 140:420265
 REFERENCE 8: 140:420063

REFERENCE 9: 140:405731

REFERENCE 10: 140:396579

L36 ANSWER 17 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN 144-62-7 REGISTRY

CN Ethanedioic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxalic acid (8CI)

OTHER NAMES:

CN Aktisal

CN Aquisal

CN NSC 132055

CN NSC 151956

CN NSC 62774

CN NSC 76990

CN Oxagel

CN Ultraplast Activate S 52

FS 3D CONCORD

DR 63504-28-9, 97993-78-7, 216451-38-6

MF C2 H2 O4

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

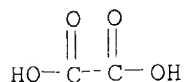
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

27580 REFERENCES IN FILE CA (1907 TO DATE)

1727 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 27614 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:15961
 REFERENCE 2: 141:15954
 REFERENCE 3: 141:13508
 REFERENCE 4: 141:13495
 REFERENCE 5: 141:13418
 REFERENCE 6: 141:12822
 REFERENCE 7: 141:12268
 REFERENCE 8: 141:11974
 REFERENCE 9: 141:11725
 REFERENCE 10: 141:11422

L36 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN 127-17-3 REGISTRY

CN Propanoic acid, 2-oxo- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pyruvic acid (8CI)

OTHER NAMES:

CN α -Ketopropionic acid

CN 2-Oxopropanoic acid

CN 2-Oxopropionic acid

CN Acetylformic acid

CN BTS

CN NSC 179

CN Pyrrolic acid

FS 3D CONCORD

DR 1892-67-7

MF C3 H4 O3

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

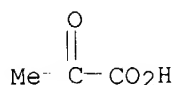
DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological

study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22175 REFERENCES IN FILE CA (1907 TO DATE)
 278 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 22194 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:5126
 REFERENCE 2: 141:4159
 REFERENCE 3: 141:4157
 REFERENCE 4: 141:3737
 REFERENCE 5: 141:3430
 REFERENCE 6: 141:3207
 REFERENCE 7: 141:1169
 REFERENCE 8: 140:432424
 REFERENCE 9: 140:422905
 REFERENCE 10: 140:422647

L36 ANSWER 19 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN 113-24-6 REGISTRY

CN Propanoic acid, 2-oxo-, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pyruvic acid, sodium salt (7CI, 8CI)

OTHER NAMES:

CN Sodium α -ketopropionate

CN Sodium pyruvate

DR 220803-31-6

MF C3 H4 O3 . Na

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PROMT, PS, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report

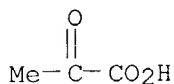
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP

(Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

CRN (127-17-3)



● Na

1007 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1009 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:5889

REFERENCE 2: 141:5851

REFERENCE 3: 140:422476

REFERENCE 4: 140:420208

REFERENCE 5: 140:385780

REFERENCE 6: 140:356211

REFERENCE 7: 140:333767

REFERENCE 8: 140:320131

REFERENCE 9: 140:283992

REFERENCE 10: 140:249106

L36 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN

RN **78-98-8** REGISTRY

CN Propanal, 2-oxo- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pyruvaldehyde (8CI)

OTHER NAMES:

CN α -Ketopropionaldehyde

CN 2-Ketopropionaldehyde

CN 2-Oxopropanal

CN 2-Oxopropionaldehyde

CN Acetylformaldehyde

CN Acetylformyl

CN Methylglyoxal

CN NSC 626580

CN NSC 79019

CN Pyrroacemic aldehyde

CN Pyruvic aldehyde

FS 3D CONCORD
 MF C3 H4 O2
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*,
 HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT,
 NIOSHTIC, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER,
 USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

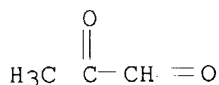
DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent;
 Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
 FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
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 (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
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 MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
 NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
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 (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
 reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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 45 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2577 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:6779
 REFERENCE 2: 141:5297
 REFERENCE 3: 141:3206
 REFERENCE 4: 140:423872
 REFERENCE 5: 140:419138
 REFERENCE 6: 140:404795
 REFERENCE 7: 140:375140
 REFERENCE 8: 140:373275
 REFERENCE 9: 140:370765

REFERENCE 10: 140:363741

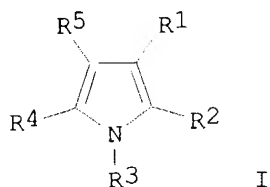
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 L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
 L20 1606 SEA FILE=REGISTRY ABB=ON PLU=ON COLLOID? OR SUSPENSION? OR
 DISPERS?
 L21 1941897 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR COLLOID? OR SUSPENSION?
 OR DISPERS?
 L22 140971 SEA FILE=HCAPLUS ABB=ON PLU=ON L21(L)L6
 L58 151635 SEA FILE=HCAPLUS ABB=ON PLU=ON ?DIONE
 L59 485 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L22
 L60 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND (?PHARM? OR ?THERAP?
 OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)

=> d ibib abs hitrn 160 1-24

L60 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:551493 HCAPLUS
 DOCUMENT NUMBER: 139:117337
 TITLE: Preparation of pyrrole derivatives as androgen
 receptor antagonists
 INVENTOR(S): Furuya, Shuichi; Matsunaga, Nobuyuki; Kusaka, Masami;
 Hara, Takahito; Miyazaki, Junichi
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 306 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003057669	A1	20030717	WO 2002-JP13652	20021226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003252854	A2	20030910	JP 2002-378462	20021226
PRIORITY APPLN. INFO.:			JP 2001-399143	A 20011228
OTHER SOURCE(S):		MARPAT 139:117337		
GI				



AB Androgen receptor antagonists and excellent preventive and **therapeutic drugs** for hormone-dependent cancers, in particular prostate cancer, are provided by compds. represented by the general formula (I) or salts or **prodrugs** thereof (wherein R1 is hydrogen or a group bonded through a carbon, nitrogen, oxygen, or **sulfur** atom; R2 is hydrogen or a group bonded through a carbon, nitrogen, oxygen, or **sulfur** atom; R3 is hydrogen, an optionally substituted hydrocarbon group, acyl, or an optionally substituted heterocyclic group; R4 is hydrogen or a group bonded through a carbon, nitrogen, oxygen, or **sulfur** atom; and R5 is an optionally substituted cyclic group). Thus, a **suspension** of 0.15 g KOH powder in 5 mL THF was cooled in an ice bath, treated dropwise with 1.0 mL Et acetoacetate, stirred at the same temperature for 15 min, treated with 0.56 g 1-nitro-4-[(1E)-2-nitro-1-propenyl]benzene (preparation given), and stirred at room temperature for 3 h to give, after workup, an intermediate which was treated with 16 mL MeOH, 1.2 mL H₂O, and 0.2 mL concentrated HCl, and refluxed for 2 h to give, after workup and silica gel chromatog., 0.32 g 2,5-dimethyl-4-(4-nitrophenyl)-1-h-pyrrole-3-carboxylic acid Et ester (II). A solution of II (4.87 g) in THF was added to a **suspension** of NaH in THF in an ice bath and stirred at the same temperature for 1 h, followed by adding 2.0 mL benzyl bromide, and the resulting mixture was stirred for 3 h to give, after workup and silica gel chromatog., 1-benzyl-2,5-dimethyl-4-(4-nitrophenyl)-1-h-pyrrole-3-carboxylic acid Et ester (III). II and III in vitro inhibited the binding of radiolabeled mibolerone to wild-type LNCap androgen receptor with IC₅₀ of 190 and 7.8 nM, resp. Various specific formulations containing compds. I, e.g. an ampule containing III, were described.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:696548 HCAPLUS
 DOCUMENT NUMBER: 137:181947
 TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
 INVENTOR(S): Daniloff, George Y.; Kalivretenos, Aristotle G.; Nikolaitchik, Alexandre V.
 PATENT ASSIGNEE(S): Sensors for Medicine and Science, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S. Ser. No. 754,217.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002127626	A1	20020912	US 2001-29184	20011228
US 2002090734	A1	20020711	US 2001-754217	20010105
WO 2002057788	A2	20020725	WO 2002-US199	20020104
WO 2002057788	A3	20031127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1388014 A2 20040211 EP 2002-713356 20020104

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2003082663 A1 20030501 US 2002-187903 20020703
 PRIORITY APPLN. INFO.: US 2001-754217 A2 20010105
 US 2001-269887P P 20010221
 US 2001-329746P P 20011018
 US 2001-29184 A 20011228
 WO 2002-US199 W 20020104
 US 2002-363885P P 20020314

OTHER SOURCE(S): MARPAT 137:181947

AB The invention concerns compns. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur**, derivs.

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L60 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:429542 HCAPLUS

DOCUMENT NUMBER: 137:11003

TITLE: Chondroprotective/restorative compositions containing hyaluronic acid

INVENTOR(S): Pierce, Scott W.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002068718	A1	20020606	US 2001-967977	20011002
PRIORITY APPLN. INFO.:			US 2000-237838P	P 20001003

AB An oral composition based on hyaluronic acid or its salts and optionally a **therapeutic drug** is provided for treating or preventing osteoarthritis, joint effusion, joint inflammation and pain, synovitis, lameness, post-operative arthroscopic surgery, deterioration of proper joint function including joint mobility, the reduction or inhibition of metabolic activity of chondrocytes, the activity of enzymes that degrade cartilage, and the reduction or inhibition of the production of hyaluronic acid in a mammal. Addnl., compns. containing hyaluronic acid, chondroitin sulfate and glucosamine sulfate in a paste formulation are also described which can be administered on their own or can be used as a feed additive for cats and dogs. For example, a composition contained (by weight) glucosamine sulfate 36%, chondroitin sulfate 4%, sodium hyaluronate 0.144%, manganese sulfate 0.144%, ibuprofen 200 mg, powdered sugar 20%, glycerin 0.7%, xanthan gum 0.2%, sodium benzoate 0.7%, citric acid 0.2%, molasses 23.5%, and water 14.4%.

IT **7704-34-9, Sulfur**, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chondroprotective/restorative compns. containing hyaluronic acid for treatment of joint disorders)

L60 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:240593 HCAPLUS

DOCUMENT NUMBER: 136:268181
 TITLE: Solid preparations containing a large amount of a physiologically active substance
 INVENTOR(S): Nakano, Yoshinori; Yoneyama, Shuji; Ochi, Masashi
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 81 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024230	A1	20020328	WO 2001-JP8264	20010921
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001088102	A5	20020402	AU 2001-88102	20010921
JP 2002167327	A2	20020611	JP 2001-290149	20010921
EP 1319409	A1	20030618	EP 2001-967797	20010921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004034039	A1	20040219	US 2003-380725	20030729
PRIORITY APPLN. INFO.:			JP 2000-289345	A 20000922
			WO 2001-JP8264	W 20010921

OTHER SOURCE(S): MARPAT 136:268181

AB It is intended to provide granules containing a large amount of a physiol. active substance which is hardly soluble in water and highly water-repellent, and solid prepn. containing these granules which are excellent in the disintegration properties and the elution of the physiol. active substance. Disclosed are (1) granules containing a physiol. active substance and a cellulose-based disintegrating agent; (2) granules containing a physiol. active substance, a cellulose-based disintegrating agent and a binder; (3) solid prepn. comprising granules (1) or (2) as described above, a cellulose-based disintegrating agent and a stearic acid-based lubricant; and (4) the solid prepn. (3) as described above which are shaped into ellipsoidal tablets. A tablet was formulated containing 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-**dione** (preparation given) 100, lactose 285, starch 50, hydroxypropyl cellulose 20, Ca carmellose 40, 40 and Mg stearate 5 mg. The tablet was coated with a composition containing hydroxypropyl Me cellulose 17.8, titania 2, and iron oxide 0.2 mg.

IT 7704-34-9, Sulfur, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of phenylthienopyrimidinone derivs. and oral formulations containing them)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:923639 HCAPLUS

DOCUMENT NUMBER: 136:58811

TITLE: Biodegradable polymers for sustained-release compositions

INVENTOR(S): Hata, Yoshio; Yamagata, Yutaka; Igari, Yasutaka

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., USA

SOURCE: PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001095940	A1	20011220	WO 2001-JP5009	20010613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001064264	A5	20011224	AU 2001-64264	20010613
EP 1291023	A1	20030312	EP 2001-938630	20010613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002068982	A2	20020308	JP 2001-180061	20010614
US 2004023987	A1	20040205	US 2002-297695	20021206
PRIORITY APPLN. INFO.: JP 2000-178534 A 20000614 WO 2001-JP5009 W 20010613				
AB Disclosed are compns. containing a nonpeptidyl physiol. active substance and a biodegradable polymer having two or more terminal carboxyl groups or its salt which have the following characteristics: (1) the content of the nonpeptidyl physiol. active substance can be elevated and the release thereof can be regulated or accelerated to thereby ensure the achievement of the pharmacol. effect; (2) in case where the nonpeptidyl physiol. active substance has s.c. irritation, it is expected that the irritation can be overcome by the terminal groups having a high acidity; and (3) having a high glass transition point and thus being highly stable. 5-(N-Benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)- dione was prepared and formulated with tartronic acid-terminated polylactic acid to give microcapsules.				
IT 7704-34-9, Sulfur , reactions RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of thienopyrimidines and formulation with carboxy-terminated polymers for sustained release)				
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L60 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:798540 HCAPLUS
 DOCUMENT NUMBER: 135:339201
 TITLE: Comparative phenotype analysis for assessment of biologically active compounds such as antimicrobials
 INVENTOR(S): Bochner, Barry
 PATENT ASSIGNEE(S): Biolog, Inc., USA
 SOURCE: PCT Int. Appl., 52 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001081920 A2 200111101 WO 2001-US40572 20010420
 WO 2001081920 A3 20020822
 W: JP, US
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE, TR
 US 6696239 B1 20040224 US 2000-556898 20000420
 US 6436631 B1 20020820 US 2001-776332 20010202
 EP 1274997 A2 20030115 EP 2001-971452 20010420
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI, CY, TR
 JP 2004511207 T2 20040415 JP 2001-578955 20010420
 US 2003162164 A1 20030828 US 2002-126345 20020419
 WO 2003089652 A2 20031030 WO 2003-US11866 20030416
 WO 2003089652 A3 20040318
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
 UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2000-556898 A 20000420
 US 2001-776332 A 20010202
 US 2001-285541P P 20010420
 WO 2001-US40572 W 20010420
 US 2002-126345 A 20020419

AB The present invention relates to using multitest panels to improve the effectiveness, throughput, and efficiency of testing and com. development of biol. active compds., in particular those useful in human, animal, and plant health. In particular, the present invention provides phenotype microarrays suitable for testing biol. active compds. for their potential application in clin., veterinary, and plant health.

IT 7704-34-9D, Sulfur, compds., biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(comparative phenotype anal. for assessment of biol. active compds. such as antimicrobials)

L60 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:661428 HCAPLUS

DOCUMENT NUMBER: 135:227012

TITLE: Processes for the production of thienopyrimidine derivatives as **pharmaceutical** intermediates

INVENTOR(S): Fukuoka, Koichiro; Yamamoto, Hiroaki; Kimura, Kazuhiro; Kawakami, Junichi; Miki, Shokyo

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

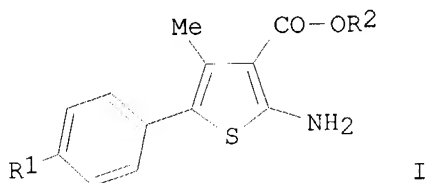
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064683	A1	20010907	WO 2001-JP1447	20010227
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,			

SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 2001034188 A5 20010912 AU 2001-34188 20010227
 JP 2001316391 A2 20011113 JP 2001-51834 20010227
 EP 1266898 A1 20021218 EP 2001-906336 20010227
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 20030055269 A1 20020827 US 2002-220233 20020827
 PRIORITY APPLN. INFO.: JP 2000-105769 A 20000229
 WO 2001-JP1447 W 20010227
 OTHER SOURCE(S): CASREACT 135:227012; MARPAT 135:227012
 GI



AB This document discloses processes for mass-producing on an industrial scale intermediates for the preparation of thienopyrimidine derivs. exhibiting GnRH (gonadotropin releasing hormone) antagonism, and so on. Specifically, a process for the production of compds. of the general formula I [R1 is hydrogen, nitro, halogeno, phthalimido, mono- or di-(alkylcarbonyl)amino, or alkoxy; and R2 is alkyl or aryl] comprises converting a phenylacetic acid derivative into an acid halide, reacting this acid halide with a malonic acid ester and magnesium alkoxide, treating the product with an acid, and reacting the resulting product with sulfur and a compound of the general formula NCCH2COOR2 [R2 = alkyl, etc.] in the presence of a primary amine. The processes make it possible to mass-produce thienopyrimidine derivs. exhibiting GnRH antagonism in high yield and high efficiency on an industrial scale by simple means.

IT 7704-34-9, Sulfur, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
 (processes for production of thienopyrimidine derivs. as
pharmaceutical intermediates)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:78205 HCAPLUS

DOCUMENT NUMBER: 134:136767

TITLE: Strip pack for providing nutritional and/or
therapeutic agents

INVENTOR(S): Hermelin, Marc S.; Kirschner, Mitchell L.

PATENT ASSIGNEE(S): Drugtech Corporation, USA

SOURCE: PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001007012	A1	20010201	WO 2000-US17959	20000630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6375956	B1	20020423	US 1999-358540	19990722
BR 2000013173	A	20020402	BR 2000-13173	20000630
EP 1207850	A1	20020529	EP 2000-943311	20000630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003505154	T2	20030212	JP 2001-511899	20000630
PRIORITY APPLN. INFO.: US 1999-358540 A 19990722 WO 2000-US17959 W 20000630				
AB The present invention relates to a disposable dispensing apparatus which provides optimal therapeutic support to humans and other animals by conveniently supplying a complex dosing regimen requiring simultaneous administration of storage-incompatible or unevenly dosed components in a shelf stable user-friendly format. The present invention is particularly useful for humans with special therapeutic needs, such as pregnant, lactating and/or menopausal women. Schematic drawing of the disposable dispensing apparatus is depicted (no data).				
IT 7704-34-9, Sulfur , biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (strip pack for providing nutritional and/or therapeutic agents)				
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L60 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:513835 HCAPLUS

DOCUMENT NUMBER: 131:188911

TITLE: Regenerative thermal oxidation (RTO) technology to meet VOC/HAPS emissions requirements - BACT [Best Available Control Technology] and MACT [Maximum Achievable Control Technology]/LAER [Lowest Achievable Emission Rate]

AUTHOR(S): Seiwert, Joseph J., Jr.

CORPORATE SOURCE: Smith Environmental Corp., Ontario, CA, 91761, USA

SOURCE: Proceedings of the International Conference on Incineration and Thermal Treatment Technologies, Oakland, Calif., May 12-16, 1997 (1997), 259-262.
 University of California, Irvine: Irvine, Calif.
 CODEN: 67YSAR

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Regenerative Thermal Oxidation (RTO) technol. has been successfully applied for abatement of process emissions containing VOCs (volatile organic compds.) and HAPs (hazardous air pollutants) ("air toxics"). Most RTO applications to date have involved more conventional hydrocarbon compds. emitted in air streams. Based on com.-scale operating experience, this paper focuses on the design considerations and technol. requirements for advanced RTO systems handling VOC/HAP emissions including Cl-, N- and S-containing orgs., as well as particulates, CO, and NOx. Included are systems operating with low inlet O2 levels. Requirements for ancillary equipment, such as acid gas scrubbers and particulate control systems, are also reviewed from a design/performance standpoint, with the objectives of providing complete

systems to meet overall emissions regulations, minimizing operating costs and providing the utmost safety and reliability in operation. Emission performance data are presented for several unique RTO systems.

IT 7704-34-9D, Sulfur, organic compds., processes

RL: REM (Removal or disposal); PROC (Process)

(regenerative thermal oxidation technol. to meet volatile organic compound/hazardous air pollutant emission stds.)

L60 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:795022 HCAPLUS

DOCUMENT NUMBER: 130:38396

TITLE: Preparation of thieno[2,3-d]pyrimidinediones in treatment of reversible obstructive airways disease

INVENTOR(S): Cheshire, David; Cooke, Andrew; Cooper, Martin;

Donald, David; Furber, Mark; Perry, Matthew; Thorne, Philip

PATENT ASSIGNEE(S): Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

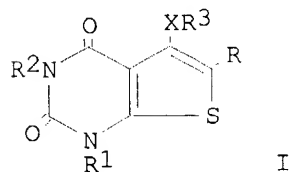
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854190	A1	19981203	WO 1998-SE935	19980518
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9876808	A1	19981230	AU 1998-76808	19980518
AU 723708	B2	20000907		
EP 991653	A1	20000412	EP 1998-924705	19980518
EP 991653	B1	20021016		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EE 9900539	A	20000615	EE 1999-539	19980518
EE 4018	B1	20030415		
BR 9809481	A	20000620	BR 1998-9481	19980518
TR 9902904	T2	20000621	TR 1999-9902904	19980518
JP 2002500666	T2	20020108	JP 1999-500565	19980518
AT 226205	E	20021115	AT 1998-924705	19980518
PT 991653	T	20030228	PT 1998-924705	19980518
ES 2184270	T3	20030401	ES 1998-924705	19980518
CN 1122037	B	20030924	CN 1998-807378	19980518
SK 283589	B6	20031007	SK 1999-1513	19980518
RU 2225410	C2	20040310	RU 1999-128111	19980518
US 6180635	B1	20010130	US 1998-117426	19980730
MX 9910911	A	20000430	MX 1999-10911	19991125
NO 9905810	A	20000127	NO 1999-5810	19991126
US 6342502	B1	20020129	US 2000-693896	20001023
US 6469014	B1	20021022	US 2001-977944	20011017
US 2002183337	A1	20021205		
US 2003191142	A1	20031009	US 2002-265201	20021007
PRIORITY APPLN. INFO.:			SE 1997-2001	A 19970528
			WO 1998-SE935	W 19980518
			US 1998-117426	A1 19980730
			US 2000-693896	A1 20001023

US 2001-977944 A1 20011017

OTHER SOURCE(S):
GI

CASREACT 130:38396; MARPAT 130:38396



AB Title compds. [I; R is arylcarbonyl, aryl, arylalkyl; R1 and R2 are independently H, alkyl, alkenyl, cycloalkyl; X represents S(O)_n, COO, NHCOO, etc.; R3 is Ph, pyridyl, CN, CO₂H, SO₂NH₂, etc.; n is 0, 1, 2], stereoisomers, a **pharmaceutically**-acceptable salt or solvate are prepared via cyclization and oxidation processes. Title compds. were useful in the (prophylactic) treatment of autoimmune, inflammatory, proliferative and hyperproliferative diseases and immunol.-mediated diseases including rejection of transplanted organs or tissues and Acquired Immunodeficiency Syndrome (AIDS).

IT 7704-34-9, Sulfur, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of thienopyrimidinediones in treatment of reversible obstructive airway disease)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:220542 HCAPLUS

DOCUMENT NUMBER: 126:207522

TITLE: Stat 5 SH2 domain-specific compounds for enhancement of erythropoiesis

INVENTOR(S): Dunnington, Damien John

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Dunnington, Damien John

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702024	A1	19970123	WO 1996-US11158	19960628
W:	AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9649237	A1	19960827	AU 1996-49237	19960209
EP 809490	A1	19971203	EP 1996-905494	19960209
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI			
BR 9607614	A	19980609	BR 1996-7614	19960209
JP 10513474	T2	19981222	JP 1996-524486	19960209
EP 811159	A1	19971210	EP 1996-906615	19960212
R:	BE, CH, DE, DK, FR, GB, IT, LI, NL			
JP 10513564	T2	19981222	JP 1996-524493	19960212

CA 2225666	AA	19970123	CA 1996-2225666	19960628
AU 9664055	A1	19970205	AU 1996-64055	19960628
ZA 9605499	A	19980330	ZA 1996-5499	19960628
ZA 9605500	A	19980330	ZA 1996-5500	19960628
EP 835104	A1	19980415	EP 1996-923579	19960628
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 10512585	T2	19981202	JP 1996-505268	19960628
FI 9703259	A	19971008	FI 1997-3259	19970807
NO 9703659	A	19971008	NO 1997-3659	19970808

PRIORITY APPLN. INFO.:

US 1995-497357	A	19950630
US 1996-598715	A2	19960208
US 1995-386381	A	19950210
US 1995-400220	A	19950307
WO 1996-US1964	W	19960209
WO 1996-US2490	W	19960212
WO 1996-US11158	W	19960628

AB Invented is a method of enhancing erythropoiesis in a subject which comprises administering to the subject a **therapeutically** effective amount of a compound which binds to a human Stat 5 SH2 domain with a binding affinity greater than fifty-fold higher than the binding affinity with which the compound binds to a human Stat 6 SH2 domain, binds to a human hcp SH2 domain, a human Grb2 SH2 domain, a human SH-PTP2 SH2 domain and a human p85 SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 5 SH2 domain, and binds to a human src SH2 domain, a human lck SH2 domain and a human fyn SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 5 SH2 domain.

IT **7704-34-9, Sulfur, reactions**

RL: RCT (Reactant); RACT (Reactant or reagent)

(Stat 5 SH2 domain-specific compds. to enhance erythropoiesis)

L60 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:192125 HCAPLUS

DOCUMENT NUMBER: 126:181352

TITLE: Use of Stat 6 SH2 domain-specific compounds to treat allergic reactions

INVENTOR(S): Dunnington, Damien John

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Dunnington, Damien John

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702023	A1	19970123	WO 1996-US11074	19960628
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9649237	A1	19960827	AU 1996-49237	19960209
EP 809490	A1	19971203	EP 1996-905494	19960209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI				
BR 9607614	A	19980609	BR 1996-7614	19960209
JP 10513474	T2	19981222	JP 1996-524486	19960209
EP 811159	A1	19971210	EP 1996-906615	19960212

R: BE, CH, DE, DK, FR, GB, IT, LI, NL

JP 10513564	T2	19981222	JP 1996-524493	19960212
CA 2225668	AA	19970123	CA 1996-2225668	19960628
AU 9664807	A1	19970205	AU 1996-64807	19960628
ZA 9605499	A	19980330	ZA 1996-5499	19960628
ZA 9605500	A	19980330	ZA 1996-5500	19960628
EP 871436	A1	19981021	EP 1996-924322	19960628

R: BE, CH, DE, ES, FR, GB, IT, LI, NL

JP 2000514036	T2	20001024	JP 1997-505234	19960628
FI 9703259	A	19971008	FI 1997-3259	19970807
NO 9703659	A	19971008	NO 1997-3659	19970808

PRIORITY APPLN. INFO.:

US 1995-497357	A	19950630
US 1996-598716	A	19960208
US 1995-386381	A	19950210
US 1995-400220	A	19950307
WO 1996-US1964	W	19960209
WO 1996-US2490	W	19960212
WO 1996-US11074	W	19960628

AB Invented is a method of treating allergic reactions in a subject which comprises administering to the subject a **therapeutically** effective amount of a compound which binds to a human Stat 6 SH2 domain with a binding affinity greater than fifty-fold higher than the binding affinity with which the compound binds to a human Stat 5 SH2 domain, binds to a human hcp SH2 domain, a human Grb2 SH2 domain, a human SH-PTP2 SH2 domain and a human p85 SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 6 SH2 domain, and binds to a human src SH2 domain, a human lck SH2 domain and a human fyn SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 6 SH2 domain.

IT 7704-34-9, Sulfur, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(Stat 6 SH2 domain-specific compds. to treat allergic reactions)

L60 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:580186 HCAPLUS

DOCUMENT NUMBER: 123:31620

TITLE: Accumulated pesticide and industrial chemical findings from a ten-year study of ready-to-eat foods

AUTHOR(S): KAN-DO Office and Pesticides Team

CORPORATE SOURCE: U.S. Food Drug Administration, Lenexa, KS, 66285-5905, USA

SOURCE: Journal of AOAC International (1995), 78(3), 614-31

CODEN: JAINEE; ISSN: 1060-3271

PUBLISHER: AOAC International

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This report lists the pesticide and industrial chems. found in the ready-to-eat foods tested repetitively for 10 yr through the U.S. Food and Drug Administration's Revised Market Basket Study. The study operated from 1982 to 1991. During that time 37 market baskets, each containing 234 food items that represented about 5000 food types in American diets covering all age groups, including infants and children, were collected. Each food item was individually prepared for eating; i.e., it was opened, unwrapped, washed, peeled, sliced, formulated by recipe, or cooked. Each item was then composited and anal. screened for about 300 different chems., including chlorophenoxy acids, ethylenethiourea, Me carbamates, organochlorines, organophosphates, organosulfurs, phenylureas, and pyrethroids. Overall, less than 1% of the potential of 2.5 million findings occurred for the 10-yr study period. In total, 138 different chemical residues accounted for 17,050 accumulated findings. Most findings were less than 1 µg/g, which is considered a low-level finding. Each food item averaged about 2 low-level findings per anal.

IT 7704-34-9, Sulfur, occurrence
 RL: POL (Pollutant); OCCU (Occurrence)
 (industrial chems. and pesticides of ready-to-eat foods in American diet)

L60 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1994:116847 HCAPLUS
 DOCUMENT NUMBER: 120:116847
 TITLE: Biodegradable controlled release melt-spun delivery system
 INVENTOR(S): Fuisz, Richard C.
 PATENT ASSIGNEE(S): Fuisz Technologies, Ltd., USA
 SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9324154	A1	19931209	WO 1993-US5307	19930602
W: AU, CA, HU, JP, KR, PL, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5518730	A	19960521	US 1992-893238	19920603
AU 9344058	A1	19931230	AU 1993-44058	19930602
AU 665844	B2	19960118		
JP 07507548	T2	19950824	JP 1994-500877	19930602
EP 746342	A1	19961211	EP 1993-914373	19930602
EP 746342	B1	20020814		

R: BE, CH, DE, DK, FR, GB, IE, IT, LI, LU, NL, SE
 PRIORITY APPLN. INFO.: US 1992-893238 A2 19920603
 WO 1993-US5307 A 19930602

AB Biodegradable controlled-release delivery systems using melt-spun biodegradable polymers as carriers for bio-effecting agents such as **pharmaceutical** actives are disclosed. Oral dose forms as well as implants are described. For example, polyglycolide was melt-spun in combination with various **drugs** such as vancomycin, gentamicin, tolmetin, diphenhydramine, ibuprofen, and insulin and controlled **drug** release was demonstrated.

IT 7704-34-9, Sulfur, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (controlled-release **pharmaceuticals** formed by flash-flow melt-spinning containing, biodegradable polymers as carriers in)

L60 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1992:135528 HCAPLUS
 DOCUMENT NUMBER: 116:135528
 TITLE: Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative
 CORPORATE SOURCE: United States Dept. of Transportation, Washington, DC, 20590-0001, USA
 SOURCE: Federal Register (1990), 55(246), 52402-729, 21 Dec 1990
 CODEN: FEREAC; ISSN: 0097-6326
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The hazardous materials regulations under the Federal Hazardous Materials Transportation Act are revised based on the United Nations recommendations on the transport of dangerous goods. The regulations cover the classification of materials, packaging requirements, and package marking,

labeling, and shipping documentation, as well as transportation modes and handling, and incident reporting. Performance-oriented stds. are adopted for packaging for bulk and nonbulk transportation, and SI units of measurement generally replace US customary units. Hazardous material descriptions and proper shipping names are tabulated together with hazard class, identification nos., packing group, label required, special provisions, packaging authorizations, quantity limitations, and vessel stowage requirements.

IT 7704-34-9, Sulfur, miscellaneous

RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(packaging and transport of, stds. for)

L60 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1990:545352 HCAPLUS

DOCUMENT NUMBER: 113:145352

TITLE: Method and compositions containing linolenate and linoleate for treating Alzheimer's disease

INVENTOR(S): Yehuda, Shlomo

PATENT ASSIGNEE(S): Bar Ilan University, Israel

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 366480	A2	19900502	EP 1989-311089	19891027
EP 366480	A3	19910206		
EP 366480	B1	19940824		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 1296641	A1	19920303	CA 1987-552924	19871126
US 5120763	A	19920609	US 1989-376289	19890706
IL 91802	A1	19940530	IL 1989-91802	19890927
ZA 8908096	A	19901031	ZA 1989-8096	19891025
AU 8943805	A1	19900503	AU 1989-43805	19891026
AU 620929	B2	19920227		
JP 02237919	A2	19900920	JP 1989-278812	19891027
US 5288755	A	19940222	US 1992-820562	19920114
US 5416114	A	19950516	US 1993-94769	19930720
US 5468776	A	19951121	US 1993-94770	19930720
US 5599840	A	19970204	US 1995-557677	19951113

PRIORITY APPLN. INFO.:

US 1988-263540	19881027
US 1989-359562	19890601
US 1989-376289	19890706
IL 1989-91802	19890927
IL 1986-80786	19861126
IL 1987-84273	19871025
US 1987-120830	19871116
US 1992-820562	19920114
US 1994-197241	19940216

AB Alzheimer's disease, related dementias and epilepsy are treated by administering, in absence of an oily carrier or diluent (such as C8-18 saturated fatty acids or oleic acid derivs.), to a person having the symptoms thereof, or to a person susceptible to epilepsy, a symptom-alleviating amount of a composition of matter which comprises (a) .apprx.13.0-27.5% by weight of linolenic acid and/or derivs. thereof, and (b) ≈87.0-≈72.5% by weight of linoleic acid and/or derivs. thereof, the derivs. of linolenic and linoleic acid being calculated as the free acids, and being both physiol. hydrolyzable and **pharmacol.** acceptable, or of a **pharmaceutical** formulation or nutritional composition containing

ingredients (a) and (b) in the recited proportions. The composition also contains vitamins and other substances. Thus, patients with Alzheimer's disease were given orally a mixture of linolenic acid and linoleic acid (1:4.25) for 3 wks. The conditions were markedly improved.

IT **7704-34-9, Sulfur**, biological studies

RL: BIOL (Biological study)

(**pharmaceutical** containing linoleate and linolenate and, for Alzheimer's disease and others)

L60 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:528819 HCAPLUS

DOCUMENT NUMBER: 109:128819

TITLE: Preparations of N-2-thienyl- and N-2-thiazolylbenzamides as oral antiallergy agents

INVENTOR(S): Bonifacio, Fausto; Fano, Maurizio; Trabella, Luciano; Battigelli, Giandomenico; Montagna, Davide; Bernareggi, Virgilio

PATENT ASSIGNEE(S): Valeas S.p.A. Industria Chimica e Farmaceutica, Italy

SOURCE: Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

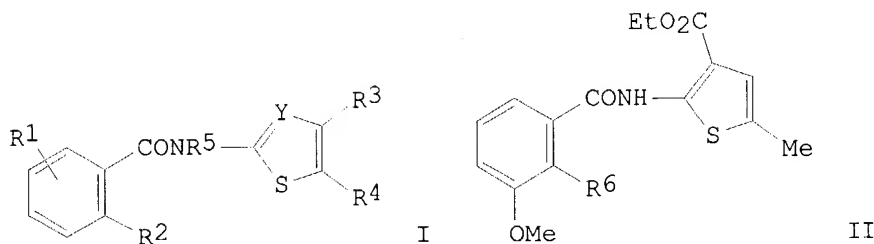
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 261503	A1	19880330	EP 1987-113169	19870909
EP 261503	B1	19920415		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 74915	E	19920515	AT 1987-113169	19870909
PRIORITY APPLN. INFO.:			IT 1986-21784	19860923
			EP 1987-113169	19870909
OTHER SOURCE(S):			MARPAT 109:128819	
GI				



AB The title compds. [I; R1 = H, 3-MeO, 3-OH, 3- or 5-Me, 3-, 4-, or 5-Cl; R2 = H, NO2, NH2, HCONH, AcNH, Me(CH2)*n*COCONH; R3 = H, Me, RO2CCH2, RO2CCO, RO2CCHOH; R = H, Et; R4 = H, linear C1-4 alkyl, CO2R; R5 = H; R2R5 = CONH, NHCO; *n* = 0-3] and their **therapeutically** acceptable salts were prepared as oral allergy inhibitors. 2,3-O2N(MeO)C6H3CO2H was converted to its chloride (94.2% yield) and amidated with Et 2-amino-5-methyl-3-thiophenecarboxylate to give 79.5% thienylbenzamide II (R6 = NO2). The latter was hydrogenated over Pd/C to give 73.5% II (R6 = NH2) (III). In the passive cutaneous anaphylaxis test in rats III had an ED50 of 0.71 + 10-3 mmol/kg orally, compared to 0.32 mmol/kg for tranilast.

IT **7704-34-9, Sulfur**, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with aldehydes and cyanoacetates)

L60 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1967:436375 HCAPLUS
 DOCUMENT NUMBER: 67:36375
 TITLE: Proposals for the Deutschen Arzneibuch (German Pharmacopoeia), Seventh Edition. Propylene glycol, **chlorophenylindandione**, and determination of halogen and sulfur according to Wurzschnitt
 AUTHOR(S): Striegler, G.; Gerecke, K.
 CORPORATE SOURCE: Deut. Inst. Arzneimittellwesen, Berlin, Germany
 SOURCE: Arzneimittelstandardisierung (1966), 7, 645-50
 From: CZ 1967, (12), Abstr. No. 1720
 CODEN: AZNMA6; ISSN: 0518-8369
 DOCUMENT TYPE: Journal
 LANGUAGE: German

AB The properties, phys. identity and purity testing, determination of the content, preservation, dosages of propylene glycol and **chlorophenylindandione**, as well as the Wurzschnitt determination of Br or Cl, of I, and of S are described.

IT **7704-34-9**, analysis
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of)

L60 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1965:462012 HCAPLUS
 DOCUMENT NUMBER: 63:62012
 ORIGINAL REFERENCE NO.: 63:11265e-f
 TITLE: Preparation for the treatment of acne
 PATENT ASSIGNEE(S): Upjohn Co.
 SOURCE: 12 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 645930		19640930	BE	19640331

AB A **pharmaceutical** preparation composed of S, neomycin, a nontoxic Al salt, and an anti-inflammatory glucocorticoid in a nontoxic vehicle is useful for topical application in the treatment of acne. A typical lotion formula contains neomycin sulfate U.S.P., colloidal S, micronized methylprednisolone acetate, Al chlorohydroxide complex, glyceryl monostearate, spermaceti, polyethylene glycol 400 stearate, Tween 85, propylene glycol, perfume oil, and H2O U.S.P.

IT **7704-34-9, Sulfur**
 (acne preparation containing)

L60 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1963:26569 HCAPLUS
 DOCUMENT NUMBER: 58:26569
 ORIGINAL REFERENCE NO.: 58:4379e-f
 TITLE: Determination of sulfur content in ointments
 AUTHOR(S): Velescu, G.
 SOURCE: Farmacia (Bucharest, Romania) (1962), 10, 297-8
 CODEN: FRMBAZ; ISSN: 0014-8237
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

AB Elementary S in ointments was determined by hot filtration in vacuo, washing the remaining S with EtOH, and dissolving in CS2, followed by solvent evaporation and weighing. Apparatus employed is described.

IT 7704-34-9, Sulfur
(analysis, determination in ointments)

L60 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1962:449309 HCAPLUS

DOCUMENT NUMBER: 57:49309

ORIGINAL REFERENCE NO.: 57:9841b-i, 9842a-b

TITLE: Reactions of 2,3,5,6-tetrakis(β -hydroxyethylthio)-

1,4-hydroquinone and related compounds

AUTHOR(S): Kulka, Marshall

CORPORATE SOURCE: Dominion Rubber Co. Ltd., Guelph

SOURCE: Canadian Journal of Chemistry (1962), 40, 1235-41

CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB The reaction of 2,3,5,6-tetrakis(β -hydroxyethylthio)-1,4-hydroquinone (I) with HCl is extremely sensitive to temperature I, sparkling yellow crystals, m. 144-5°, was prepared in 72% yield by stirring 100 g. chloranil (II) in 30.5 l. C₆H₆ at 45° during the 2 hr. addition of 200 ml. HS(CH₂)₂OH containing 96 g. KOH, and an addnl. 2 hrs. After standing overnight the C₆H₆ was decanted and the solid stirred 0.5 hr. with cold H₂O, filtered, and crystallized from MeOH-H₂O. The infrared spectra and the fact that I was unchanged on treatment with Zn and AcOH indicated that II is reduced in the reaction and I is the quinol. Refluxing I 2 hrs. with Ac₂O and C₅H₅N or saturating an AcOH solution with HCl at 60° and leaving overnight gave the 2,3,5,6-tetraacetate, m. 90-1°. I was also prepared by refluxing either 2,5-dichloro-3,6-dimorpholino-1,4-benzoquinone 15 hrs. with HS(CH₂)₂OH and C₅H₅N in C₆H₆ or in 70% yield from 2,5-dichloro-3,6-bis(dimethylamino)-1,4-benzoquinone. At 20°, I (25 g.) left overnight in 250 ml. concentrated HCl saturated with HCl gave a hard cake which was pulverized, washed with H₂O, dried, dissolved in 100 ml. CHCl₃ and treated with 15 ml. SOCl₂ at 30° to complete the chlorination yielding 20 g. III, m. 129-30°. When the reaction was carried out without saturation of the concentrated HCl, the results were the same but in a few runs V (see below) was obtained and no III, perhaps resulting from excess humidity. Heated at 35-7° for 6 hrs., 10 g. I in 100 ml. concentrated HCl, gave a precipitate which was extracted with CHCl₃. The CHCl₃ solution dried and treated with SOCl₂ as above precipitated 4.5 g. V, and from the mother liquors after evaporation to dryness in vacuo and crystallization of the residue from C₆H₆, 3.5 g. III. III (10 g.) heated 4 hrs. on a steam bath with 50 ml. Ac₂O and 2 drops H₂SO₄, the product evaporated in vacuo, washed with Et₂O and MeOH, and crystallized from C₆H₆-MeOH gave 5.5 g. 6-acetate (IV), m. 120-2°, indicating the presence of one OH group. Pure 2,3,5,6-tetrakis(β -chloroethylthio)-1,4-hydroquinone (V), m. 179-81° (which has shown some curative activity in cancer chemotherapy), was prepared by adding 250 ml. CHCl₃ to a solution of 25 g. I in 200 ml. HCl (d. 1.19) and 55 ml. H₂O, refluxing 3 hrs. concentrating the CHCl₃ layer (in vacuo at 40°) to 75 ml., cooling to 30°, treating at 30-35° with 15 ml. SOCl₂, leaving at room temperature 3 hrs., and cooling to 0° before filtering, or by refluxing 35 g. I 0.5 hr. in 200 ml. MeOH and 40 ml. H₂O with 500 ml. concentrated HCl, extracting the precipitate with CHCl₃ and treating with SOCl₂ as above. In alc. saturated with HCl at 10°. I (25 g.) left at room temperature for 2 days and cooled to 0° gave a precipitate, m. 159-61°, which could not be purified by repeated crystallization but on treatment with SOCl₂ as above gave pure V. The structure of III was established as follows: infrared spectra and acetylation to IV show the presence of phenolic OH; pyrolysis of 25 g. III at 200° yielded 5 g. (CH₂Cl)₂; III in hot Me₂CO with 1 mole alc. KOH in MeOH gave VI, m. 228-9° (CH₂Cl)₂, which on pyrolysis at 250° gave (CH₂Cl)₂ and VII, m. 239-40° (C₆H₆), which

sublimed at 250°. The other possible structure for VI would yield a polymer which would not sublime. This structure for III is supported by the double ring closure obtained on treatment of V using 2 moles KOH and Me₂CO as above to give the same tricyclic compound, VI, as from III. The naphthalene chloroquinones differed from those in the C₆H₆ series. 2,3-Dichloro-1,4-naphthoquinone (VIII) (60 g.) treated as for II at 40° by dropping in HS(CH₂)₂OH and KOH at 40° and leaving overnight gave 12 g. 3,3-bis(β-hydroxyethylthio)-1,4-naphthoquinone (IX), m. 117-19° (MeOH), and considerable tar. But 80 ml. C₅H₅N added all at once to 100 g. VIII in 1600 ml. C₆H₆ and 72 ml. HS(CH₂)₂OH at exactly 54°, and the temperature kept at 65-7° for 15 min. gave 94 g. IX. IX (62 g.) in 620 ml. glacial Ac₂O treated with 25 g. Zn dust at 25-30° yielded 39 g. of the corresponding naphthoquinol, m. 124-6°. Attempts to chlorinate IX to form the sulfur mustard with dry HCl in MeOH or AcOH, or with SOCl₂ gave instead 1,4-oxathia-5,10-anthraquinone, black crystals, m. 231-3° (after sublimation at 200°/1 mm.), apparently by displacement of one of the HO(CH₂)₂S groups and cyclization.

IT 7704-34-9, Sulfur
(compounds, heterocyclic)

L60 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1961:105820 HCAPLUS
DOCUMENT NUMBER: 55:105820
ORIGINAL REFERENCE NO.: 55:19907h-i,19908a-i
TITLE: Benzobisimidazoles
AUTHOR(S): Marxer, A.
CORPORATE SOURCE: C I B A Ltd., Basel, Switz.
SOURCE: Helvetica Chimica Acta (1961), 44, 762-70
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German

GI For diagram(s), see printed CA Issue.

AB For the two types of 2,6-dimethylbenzo[1,2:4,5]-bisimidazole-4,8-quinones [I (R = H) and I (R = Me)], the method of Efros (CA 47, 12366i) for the preparation of I (R = H) was unsuitable for the synthesis of N-substituted derivs., while the ring closure of Fries and Reitz (CA 31, 14062) proceeded in low yield and worked only with N-aryl compds. A new convenient synthesis was described for the II, which on oxidation were converted into the I. 3,6-Dichloro-3,5-bis(acetamido)benzoquinone (III) (43.6 g.) in 400 ml. EtOH treated dropwise at 50° with 55.6 g. Me(CH₂)₁₁NH₂ and 40 g. Et₃N in 200 ml. EtOH, and stirred 9 hrs. in a H₂O bath at 80° (bath temperature) gave 65 g. OC.C(NHR):C(NHAc).CO.C(NHR):CNH Ac (IV) (R = dodecyl) (V), m. 162-5°. III (29.1 g.) in 250 ml. EtOH treated dropwise at 10° with 28.65 g. Et₂N(CH₂)₃NH₂ in 75 ml. and the mixture stirred 9 hrs. at room temperature gave 38 g. IV [R = (CH₂)₃NEt₂] di-HCl salt, m. 260-2° (decomposition). Similarly were prepared the following IV (R and m.p. given): Me, above 318° [mixture with 13% 2,6-dichloro-3,6-bis(methylamino)benzoquinone (VI)]; Bu, 217-19°; CH₂CH₂OH, 241-3°; CH₂CH₂NEt₂, - [di-HCl salt (VII) m. 205-7°]; CH₂CH₂N.CH₂.CH₂.O.CH₂.CH₂, 215-17°; (CH₂)₃NMe₂, - (di-HCl salt m. 251-2°). IV (R = Me) (containing 13% VI) (14.01 g.) in 200 ml. EtOH hydrogenated with 10 g. Raney Ni, the solids filtered off, shaken with 100 ml. 2N HCl and 100 ml. H₂O, the solution filtered, the filtrate treated with 50 ml. 6N HCl and 200 ml. absolute EtOH, and concentrated in vacuo to 200 ml. gave 12 g. II (R = Me) di-HCl salt (VIII), m. above 300° (aqueous HCl); treatment of an aqueous solution of VIII with 2N Na₂CO₃ gave II (R = Me), m. above 300°. Similarly were prepared II (R = Bu) di-HCl salt (IX), m. 313° (decomposition), and II (R = CH₂CH₂OH) di-HCl salt (X), m. 290° (decomposition). V (14.72 g.) in 250 ml. absolute EtOH shaken with 5 g. Raney Ni in an H atmospheric at 45-50°, the mixture treated with 200 ml. CHCl₃, boiled, filtered, and the filtrate treated with 100 ml. 2.4N alc. HCl gave 14 g. II [R = (CH₂)₁₁Me] di-HCl salt, m.

298-301° (decomposition) (CHCl₃-EtOH). VII (26.17 g.) in 250 ml. EtOH and 50 ml. H₂O shaken with 15 g. Raney Ni under a slight pressure of H gave after treatment with 150 ml. 2.75N alc. HCl II (R = CH₂CH₂NEt₂) tetra-HCl salt (XI), m. 308-10°; treatment of an aqueous solution of the salt with Na₂CO₃ gave the base, which was immediately oxidized to the corresponding quinone. VII (26.17 g.) reduced in 85% EtOH gave, after HCl treatment, 20 g. XI. Similarly were prepared the following II.4HCl (R and m.p. given): CH₂CH₂N.CH₂.CH₂.OCH₂.CH₂, 304-6° (decomposition); (CH₂)₃NMe₂, 291-3° (decomposition); (CH₂)₃NEt₂, 299-301° (decomposition); H, above 300°. IX (1 g.) in 15 ml. 40% H₂SO₄ treated with 1.5 g. CrO₃, heated 2 min. at 110°, cooled, the precipitate (1 g. Cr complex) filtered off, dissolved in 50 ml. 2N H₂SO₄, the solution treated with 55 ml. 2N NaOH, the precipitate extracted with Et₂O, the extract dried, and concentrated to 15 ml. gave I (R = Bu), m. 181-3°. X (10 g.) in 100 ml. H₂O treated with a rapid stream of O, and after 2 hrs. the precipitate filtered off gave 4 g. I (R = CH₂CH₂OH) (XII), m. above 300°; the mother liquor treated with 100 ml. 2N NaOH and treated a short time with O gave an addnl. 4 g. XII, m. above 300°. Similarly were prepared I (R = CH₂CH₂NEt₂) (XIII), m. 208-10° [di-HCl salt (XIV) m. 283-6°], and I (R = CH₂CH₂N.CH₂.CH₂.O.CH₂.CH₂), m. 241-3° (di-HCl salt m. 301-3°). III (29.1 g.) in 250 ml. EtOH treated dropwise with 25.3 g. Et₃N and 25.6 g. Et₂NCH₂CH₂NH₂ in 75 ml. EtOH with cooling, stirred 9 hrs. at room temperature, the precipitate filtered off, the filtrate treated with 150 ml. 2.4N alc. HCl, kept overnight, the precipitate (23 g.) filtered off, washed, dissolved in 150 ml. H₂O, and the solution treated with 150 ml. 2N NaOH gave 10 g. XIII, m. 208-10°; XIV m. 283-6° (decomposition). **Pharmacol.** investigations of the new I and II showed that when R was alkyl, the compds. had a sedative effect, while those compds. with basic substituents acted as hypertensive agents; in addition effects against protozoa, especially trypanosomes, were ascertained.

IT **7704-34-9, Sulfur**
(compds., heterocyclic, hydrolysis of)

L60 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1957:91151 HCAPLUS
 DOCUMENT NUMBER: 51:91151
 ORIGINAL REFERENCE NO.: 51:16579f-g,16580a-d
 TITLE: 11-Oxygenated steroids
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 764320		19561228	GB	

AB Conversion of 14-unsubstituted 7,11-dioxo steroids to the 7-mono derivative and reduction produces 14-unsubstituted 11-oxo steroids useful as intermediate products for the manufacture of **therapeutically** active 11-oxo and 11-hydroxy steroids. Xa 1.3 in 24 parts HSCH₂CH₂SH saturated 1 hr. at 0° with dry HCl excess HCl removed in vacuo at room temperature, excess thiol removed by distillation, and the residue recrystd. from CHCl₃-MeOH gave Xa 7-mono(ethylenedithio ketal) (Xb), m. 224-5°. Xb 0.1 in dioxane 5 added to a freshly prepared **suspension** of Raney alloy 5 in 20 parts dioxane, the mixture refluxed 3 hrs. and filtered, the filtrate evaporated in vacuo and the residue recrystd. from MeOH-H₂O gave 3β-acetoxyergostan-11-one, m. 135-6°, [α]_D₂₀ 32° (c 0.905, CHCl₃). Use of less active Raney Ni gave 3β-acetoxyergost-22-en-11-one (Xc), m. 125-6°. Xa 1 treated 24 hrs. at room temperature with H₂NNHCONH₂.AcOH solution 100 (H₂NNHCONH₂.HCl 100 and KOAc 200 in MeOH 700), and the mixture filtered gave 0.9 parts Xa 7-monosemicarbazone (Xd),

m. 244-8° (decomposition). Xd, dried in high vacuum at 100°, heated 6 hrs. at 200° with NaOEt 100 (from Na 5 in 100 parts absolute alc.) in a sealed tube, the product extracted with Et2O and acetylated with Ac2O and pyridine yielded 0.7 parts Xc, also obtained by analogous treatment of the corresponding 7-monoxime. Xa 1.5 in HO(CH2)3OH solubilized by addition of MeOH and heating at 100°, the solution treated with N2H4.H2O 2 and heated 15 min. on a steam bath, the mixture treated with N2H4.H2O 1.6, NaOH 10, and H2O 20 and heated 3 hrs. at 180°, the mixture worked up and the product heated 30 min. on a steam bath with Ac2O 50 and pyridine 50, the mixture evaporated in vacuo, the product chromatographed on Al2O3, eluted with 9:1 and 8:2 petr. ether-C6H6, and the fractions crystallized from MeOH-H2O gave Xc, $[\alpha]_D^{25}$ (c 1.576, CHCl3). Similarly XI was converted to the crystalline 7-mono(ethylenedithio ketal) and reductively **desulfurized** in dioxane with Raney Ni to 3 β ,20-diacetoxyallopregnan-11-one. XIb reduced as above with N2H4.H2O in HO(CH2)3OH and the reduction product acetylated, gave after chromatography and recrystn. from MeOH-H2O, 3 β -acetoxystigmast-22-en-11-one. XIc was similarly reduced to 3 β -hydroxycholestan-11-one, m. 152°. XIIa converted to the 7-mono(ethylenedithio ketal) was reduced and worked up to give Me 3-acetoxy-11-oxocholanate, m. 127-8° (from C6H14-C5H12), $[\alpha]_D^{25}$ (c 1.49, Me2CO). Similarly, XIc 7-mono(ethylenedithio ketal), m. 203-4°, $[\alpha]_D^{25}$ -33° (CHCl3) was reductively **desulfurized** to 3 β ,17 β -diacetoxy-androstan-11-one, m. 153-4°, $[\alpha]_D^{25}$ 14° (CHCl3).

L60 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1929:29871 HCAPLUS

DOCUMENT NUMBER: 23:29871

ORIGINAL REFERENCE NO.: 23:3539g-i

TITLE: Application of "critical solution temperature" to **pharmaceutical** investigations

AUTHOR(S): Wratschko, F.

SOURCE: Pharmazeutische Presse (1929), 34, 143-5

CODEN: PPWHAT; ISSN: 0370-1379

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB In connection with a discussion of the possible use of the "critical solution temperature" in the examination of **pharmaceutical** preps., the following values were determined for the pairs: Et2N-H2O 18.6, butyric acid-H2O 24.3, CS2-McOH 40.5, C6H14-MeOH 42.8, C2H4(CN)2-H2O 55.4, PhOH-H2O 68.8, AcCH2Ac-H2O 87.7, salicylic acid-H2O 90.5, iso-BuOH-H2O 107, m-nitrobenzoic acid-H2O 107, resoremol-C6H6 108.9, EtCN-H2O 113.5, BzOH-H2O 115.5, PhCl-S 117, furfural-H2O 122.8, PhCNS-S 125.7, iso-BuOH-H2O 131.5, PhNH2-S 130.5, AcEt-H2O 150, C6H6-S 162.8, PhNH2-H2O 167, PhMe-s 179.5°.

IT 7704-34-9, Sulfur

(critical solution temps. of, in PhCl, CH2:CHCH2CNS, PhNH2, C6H6 or PhMe)

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L1      49 SEA FILE=REGISTRY ABB=ON  PLU=ON  DIKETONE?
L2      21774 SEA FILE=REGISTRY ABB=ON  PLU=ON  SULFUR/BI
L3      SEL  PLU=ON  L1 1- CHEM :      210 TERMS
L4      37613 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L5      54254 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR ?DIKETONE?
L6      589911 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 OR ?SULFUR?
L7      1818 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L5
L9      28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND (?ANESTHE? OR ?HISTAMIN
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      ?OINTMENT? OR URGENT? OR ?ITCH?)

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L10 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT (FLAVOR? OR CREAM(W) BUT
 TER OR FOOD#)
 L13 STR
 O=C—C=O
 1 2 3 4

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
 L15 SCR 1838
 L17 12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15
 L18 117304 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
 L20 1606 SEA FILE=REGISTRY ABB=ON PLU=ON COLLOID? OR SUSPENSION? OR
 DISPERS?
 L21 1941897 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR COLLOID? OR SUSPENSION?
 OR DISPERS?
 L22 140971 SEA FILE=HCAPLUS ABB=ON PLU=ON L21(L)L6
 L29 6235 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L18
 L30 654 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND L22
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 ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT?
 OR URGENT? OR ?ITCH?)
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 L33 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 NOT L10
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 FLAVOR? OR FOOD#)
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 L59 485 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L22
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 OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)
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=> d ibib abs hitrn 166 1-28

L66 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:42625 HCAPLUS
 TITLE: Preparation of polymeric carrier for controlling the
 drug release
 INVENTOR(S): Gao, Lin; Tan, Zhongwen; Tian, Hua; Xiang, Yingmei
 PATENT ASSIGNEE(S): Xinjiang Institute of Chemistry, Chinese Academy of
 Sciences, Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 CN 1363271 A 20020814 CN 2002-101964 20020119
 CN 2002-101964 20020119
 PRIORITY APPLN. INFO.:

AB The carrier for controlling the delivery of **drug** is prepared by copolymn. of $\text{HOOC-C(R)=C(R')-COOH}$ (R, R' = Me, Et, H, phenyl) with R1R2C=CR3R4 (R1, R2, R3, R4 = Me, Et, H, phenyl) in solvent in the presence of an initiator at 50-150°C and 0.1-0.6 MPa. The initiators used can be azodiisobutyronitrile, **dibenzoyl** peroxide, **sulfuric** acid, phosphoric acid, trichloroacetic acid, aluminum chloride, tri-Et aluminum, titanium tetrachloride, tin tetrachloride and titanium bromide; the solvents used can be water, benzene, glycerol, acetic acid, butane, pentane, hexane and liquid paraffin. The controlled-release formulation is prepared by encapsulating the **drug** in the carrier in proper solvent, adjusting pH to less than 6 with acids, separating, and drying. The acids used can be hydrochloride, **sulfuric** acid, phosphoric acid, acetic acid and oxalic acid. For example, a polymeric carrier for controlled release of **drugs** was prepared by copolymn. of 2,3-dimethylbutenedioic acid with tetramethylethylene under the initiator of azobisisobutyronitrile in hexane solution, which was then mixed with **drugs** to get **drug**-containing polymer matrix for controlling the **drug** release.

IT INDEXING IN PROGRESS

L66 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:777739 HCAPLUS

DOCUMENT NUMBER: 139:291991

TITLE: Preparation of 4-hydroxy-2-cyclopenten-1-ones and related compounds as P21Y1 receptor antagonists for the treatment of thromboembolic diseases

INVENTOR(S): Huebsch, Walter; Breuning, Matthias; Schmidt, Gunter; Albrecht, Barbara; Perzborn, Elisabeth; Faeste, Christiane; Baerfacker, Lars

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080553	A1	20031002	WO 2003-EP2532	20030312
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

DE 10213228 A1 20031016

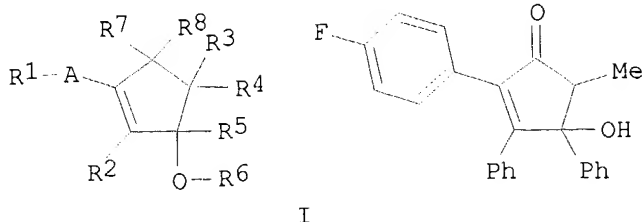
DE 2002-10213228 20020325

PRIORITY APPLN. INFO.:

DE 2002-10213228 A 20020325

OTHER SOURCE(S): MARPAT 139:291991

GI



AB Title compds. I [R1 = (un)substituted alkylaryl, heteroaryl; A = alkylene, alkenylene, alkynylene; R2, R5 = pyridyl, thienyl, furyl, etc.; R3, R4 = H, alkyl, alkenyl, etc.; R6 = H, alkyl, alkoxy, etc.; R7 = H; R8 = OH] and their **pharmaceutically** acceptable salts and formulations were prepared. For example, condensation of 1-(4-fluorophenyl)-2-butanone, e.g., prepared from 4-fluorophenylacetyl chloride and diethylzinc, and **benzil** afforded a diastereomeric mixture of hydroxycyclopentenone II. In P2Y1 receptor antagonist assays, 28-examples of compds. I exhibited IC50 values ranging from 0.002-0.3 μ M, e.g., the IC50 value of the *cis* diastereomer of cyclopentenone II was 0.03 μ M. Compds. I are claimed useful for the treatment of thromboembolic diseases.

IT 7719-09-7, Thionyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 4-hydroxy-2-cyclopenten-1-ones and related compds. as P2Y1 receptor antagonists for the treatment of thromboembolic diseases)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:576168 HCAPLUS

DOCUMENT NUMBER: 139:239085

TITLE: Hypoxia-Targeting Copper Bis(selenosemicarbazone) Complexes: Comparison with Their **Sulfur** Analogues

AUTHOR(S): Castle, Thomas C.; Maurer, Richard I.; Sowrey, Frank E.; Went, Michael J.; Reynolds, Christopher A.; McInnes, Eric J. L.; Blower, Philip J.

CORPORATE SOURCE: School of Physical Sciences, University of Kent, Canterbury, CT2 7NR, UK

SOURCE: Journal of the American Chemical Society (2003), 125(33), 10040-10049

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:239085

AB The 1st copper bis(selenosemicarbazone) complexes [Cu(L)] were synthesized, using the H2L ligands glyoxal bis(selenosemicarbazone), pyruvaldehyde bis(selenosemicarbazone), and **2,3-butanedione** bis(selenosemicarbazone). Their spectroscopic properties indicate that they are structurally analogous to their known square-planar **sulfur**-containing counterparts, the copper bis(thiosemicarbazone) complexes. Spectroscopic comparison of the **sulfur**- and selenium-containing complexes provides insight into their electronic structure. The effects on spectroscopic and redox properties of replacing **sulfur** with selenium, and of successive addition of Me groups to the ligand backbone, are rationalized in terms of their electronic structure using spin-unrestricted d. functional calcs. These suggest that, like the **sulfur** analogs, the complexes have a very low-lying empty ligand-based π -orbital immediately above the LUMO, while the LUMO itself has dx2-y2 character (i.e., is the spin partner of

the HOMO). Replacement of S by Se shifts the oxidation potentials much more than the reduction potentials, whereas alkylation of the ligand backbone shifts the reduction potentials more than the oxidation potentials. Probably oxidation and reduction involve spatially different orbitals, with the addnl. electron in the reduced species occupying the ligand-based π -orbital rather than dx^2-y^2 . D. functional calcs. on the putative singlet Cu(I)-reduced species suggest that this ligand π -character could be brought about by distortion away from planarity during reduction, allowing the low-lying ligand π -LUMO to mix into the dx^2-y^2 -based HOMO. The analogy in the structure and reduction behavior between the **sulfur-** and selenium-containing complexes suggests that labeled with positron emitting isotopes of copper (Cu-60, Cu-62, Cu-64), the complexes warrant biol. evaluation as **radiopharmaceuticals** for imaging of tissue perfusion and hypoxia.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:371661 HCAPLUS
 DOCUMENT NUMBER: 138:390526
 TITLE: Odor masking compositions containing fragrant substances for hair cosmetics
 INVENTOR(S): Kawasaki, Kiyomitsu
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003137758	A2	20030514	JP 2001-330894	20011029
			JP 2001-330894	20011029

PRIORITY APPLN. INFO.:
 AB The compns., useful for permanent wave agents, hair dyes, etc., contain ≥ 1 fragrances chosen from hydrocarbons, alcs., phenols, aldehydes and/or acetals, ketones and/or ketals, ethers, synthetic musks, acids, lactones, esters, N-, S-, and/or halogen-containing compds., and natural fragrances. A fragrance composition was prepared from 1,3,5-undecatriene 10, 10-undecenol 10, 1-octen-3-ol 10, 10-undecenal 10, 2,4-decadienal 10, 1,8-cineole 10, phenylacetic acid (1%) 10, 1-ethynylcyclohexyl acetate 10, 1-octen-3-yl acetate 5, 2-ethylhexyl acetate 10, and Abies fir oil 5 weight parts.
 IT **123-42-2, Diacetone alcohol 137-00-8**
 , 4-Methyl-5-thiazoleethanol **431-03-8, Diacetyl**
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (odor masking compns. containing fragrant substances for hair cosmetics)

L66 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:334531 HCAPLUS
 DOCUMENT NUMBER: 138:334060
 TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
 INVENTOR(S): Daniloff, George Y.; Kalivretenos, Aristotle G.; Nikolaitchik, Alexandre V.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 29,184.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003082663	A1	20030501	US 2002-187903	20020703
US 2002090734	A1	20020711	US 2001-754217	20010105
US 2002127626	A1	20020912	US 2001-29184	20011228
WO 2003078424	A1	20030925	WO 2003-US7938	20030314

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-754217	A2	20010105
US 2001-269887P	P	20010221
US 2001-329746P	P	20011018
US 2001-29184	A2	20011228
US 2002-363885P	P	20020314
US 2002-187903	A	20020703

AB Comps. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur**, compds. containing
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L66 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:574870 HCAPLUS

DOCUMENT NUMBER: 137:140538

TITLE: Novel cannabimimetic ligands, particularly 1,2,4,5-tetrazine derivatives and analogs, and their preparation and pharmaceutical use as selective CB2 ligands

INVENTOR(S): Makriyannis, Alexandros; Deng, Hongfeng

PATENT ASSIGNEE(S): University of Connecticut, USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

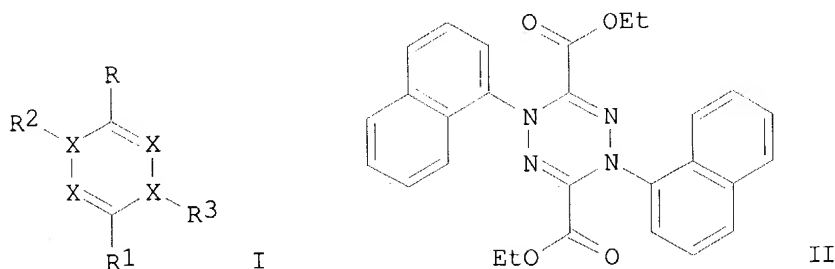
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058636	A2	20020801	WO 2002-US2157	20020125
WO 2002058636	A3	20021010		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 EP 1361876 A2 20031119 EP 2002-707564 20020125
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2004077649 A1 20040422 US 2003-466403 20031031
 PRIORITY APPLN. INFO.: US 2001-264385P P 20010126
 WO 2002-US2157 W 20020125
 OTHER SOURCE(S): MARPAT 137:140538
 GI



AB Disclosed are heterocyclic compds. and methods for their manufacture In particular, the compds. disclosed are represented by structure I [each X = (independently) CH or N; R = alkoxy, alkyl, haloalkoxy, alkylketo, alkylthioketo, CO₂H, CONR₆R₇, ester, thioester, reversed ester, reversed thioester, reversed amide, or COR₄; R₁ = same groups, except COR₅ instead of COR₄; R₂, R₃ = (un)substituted Ph, CH₂Ph, α/β -naphthyl, CH₂- α/β -naphthyl, certain N/O/S-heteroaryl or CH₂-N/O/S-heteroaryl, terpenes, etc.; R₄, R₅ = methoxy, ethoxy, propoxy, Me, amino, methylamino, ethylamino, ethylamino, butylamino, piperidino, (R)-2-hydroxy-1-methylethylamino or enantiomer, (+)-isopinocampheylamino or enantiomer; R₆, R₇ = H, alkyl, or carbalkoxyalkyl; including physiol. acceptable salts, diastereomers, enantiomers, double-bond isomers, and/or mixts.]. Also disclosed are methods of using the disclosed compds., including use of the disclosed compds. to stimulate a cannabinoid receptor, to provide a physiol. effect in an animal or individual and to treat a condition in an animal or individual. Compds. I are surprisingly potent and selective cannabinoids. A table of 25 specific compds. is given, and the same compds. are covered individually by claims. A preparatory scheme is also covered by claims. For instance, reaction of 1-naphthalenediazonium **sulfuric** acid salt with Et 2-chloroacetoacetate gave 1-Cl₁₀H₇-NHN:C(Cl)CO₂Et. This ester was cyclodimerized by NaN(SiMe₃)₂ in THF at -78°, giving the invention tetrazine II. A representative compound I inhibited adenylate cyclase in an intracellular cAMP bioassay, indicating CB₂ agonist activity. In binding studies using rat brain CB₁ receptors and mouse spleen CB₂ receptors, I generally showed selectivity for CB₂ receptors, with II showing the highest selectivity (524-fold for CB₂ over CB₁).

L66 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:555763 HCAPLUS
 DOCUMENT NUMBER: 137:106086
 TITLE: Detection of glucose in solutions also containing an
 alpha-hydroxy acid or a beta-diketone
 INVENTOR(S): Daniloff, George Y.; Kalivrentenos, Aristotle G.;
 Nikolaitchik, Alexandre V.
 PATENT ASSIGNEE(S): Sensors for Medicine and Science, Inc., USA

SOURCE: PCT Int. Appl., 83 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002057788	A2	20020725	WO 2002-US199	20020104
WO 2002057788	A3	20031127		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2002090734	A1	20020711	US 2001-754217	20010105
US 2002127626	A1	20020912	US 2001-29184	20011228
EP 1388014	A2	20040211	EP 2002-713356	20020104
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
PRIORITY APPLN. INFO.:			US 2001-754217	A 20010105
			US 2001-269887P	P 20010221
			US 2001-329746P	P 20011018
			US 2001-29184	A 20011228
			WO 2002-US199	W 20020104

OTHER SOURCE(S): MARPAT 137:106086

AB The invention concerns compns. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur**, derivs.
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L66 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:522549 HCAPLUS
 DOCUMENT NUMBER: 137:90594
 TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
 INVENTOR(S): Daniloff, George Y.; Kalivretenos, Aristotle G.; Nikolaitchik, Alexandre V.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 21 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002090734	A1	20020711	US 2001-754217	20010105
US 2002127626	A1	20020912	US 2001-29184	20011228

WO 2002057788 A2 20020725 WO 2002-US199 20020104
 WO 2002057788 A3 20031127
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 EP 1388014 A2 20040211 EP 2002-713356 20020104
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2003082663 A1 20030501 US 2002-187903 20020703
 PRIORITY APPLN. INFO.: US 2001-754217 A2 20010105
 US 2001-269887P P 20010221
 US 2001-329746P P 20011018
 US 2001-29184 A 20011228
 WO 2002-US199 W 20020104
 US 2002-363885P P 20020314

OTHER SOURCE(S): MARPAT 137:90594

AB Comps. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur**, compds. containing
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L66 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:468985 HCAPLUS

DOCUMENT NUMBER: 138:32826

TITLE: S-methyldithiocarbazate and its Schiff bases:
 evaluation of bondings and biological properties

AUTHOR(S): Tarafder, Md. Tofazzal Hossain; Kasbollah, Azahari;
 Saravanan, N.; Crouse, Karen A.; Ali, Abdul M.; Oo,
 Khor Tin

CORPORATE SOURCE: Department of Chemistry, Universiti Putra Malaysia,
 Serdang, 43400, Malay.

SOURCE: Journal of Biochemistry, Molecular Biology and
 Biophysics (2002), 6(2), 85-91
 CODEN: JBMBF6; ISSN: 1025-8140

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Eight selective nitrogen-**sulfur** donor ligands have been synthesized from the condensation of S-methyldithiocarbazate (SMDTC) with aldehydes and ketones with a view to evaluating their antimicrobial and cytotoxic activities, and also to correlate the biol. properties with the structure of the ligands. The compds. were all characterized by elemental analyses and other physicochem. techniques. SMDTC and the Schiff bases were screened for antimicrobial and cytotoxic activities. SMDTC showed very large inhibition zones (24-44 mm) against bacteria and fungi with a min. inhibitory concentration (MIC) of 390-25,000 and 1562-6250 µg ml⁻¹, against different bacteria and fungi, resp. Streptomycin and nystatin were used as the internal stds. against bacteria and fungi, resp. SMDTC along with its Schiff bases with pyridine-2-carboxaldehyde, acetylacetone

and **2,3-butanedione** were strongly antifungal and the MIC values were comparable to nystatin. Most of the Schiff bases were strongly cytotoxic. In particular, those with pyridine-2-carboxaldehyde and **2,3-butanedione** have CD50 values of 5.5, 1.9-2.0 µg ml⁻¹, resp., against leukemic cells, while against colon cancer cells, the values were 3.7 and 2.0 µg ml⁻¹, resp. The glyoxal Schiff base was strongly active only against leukemic cell with CD50 value of 4.0 µg ml⁻¹. The present findings have been compared with standard **drugs**.

IT **134-81-6, Benzil 431-03-8, 2, 3-Butanedione**

RL: RCT (Reactant); RACT (Reactant or reagent)
(S-methyldithiocarbamate and its Schiff bases and **pharmacol.** activity)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:408477 HCAPLUS

DOCUMENT NUMBER: 136:400977

TITLE: Stabilization method and composition utilizing an amphoteric polymer

INVENTOR(S): Yang, Robert K.

PATENT ASSIGNEE(S): Conagra Foods, Inc., USA

SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002041838	A2	20020530	WO 2001-US44417	20011127
WO 2002041838	A3	20020829		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002035145	A5	20020603	AU 2002-35145	20011127
US 2002115729	A1	20020822	US 2001-995326	20011127
PRIORITY APPLN. INFO.:			US 2000-253598P	P 20001127
			US 2000-253599P	P 20001127
			WO 2001-US44417	W 20011127

AB A method for increasing the stability of a food-grade or pharmaceutical-grade liquid, such as an extracted oil, herbal extract, flavor, color, or volatile chemical component used in the flavor industry, is provided. The method comprises mixing the liquid with an amphoteric polymer, preferably polyvinylpyrrolidone, to thereby infuse the liquid into the amphoteric polymer matrix and form a generally-solid, stabilized product. Optionally, bulking agents, absorbents, and flowing agents can be mixed with the liquid and amphoteric polymer to enhance the properties of the stabilized product. The inventive method is particularly useful for entrapping liqs. that are highly volatile, heat sensitive and/or easily oxidizable. For example, oleoresin capsicum was stabilized by mixing (by weight) oleoresin capsicum 25%, Tween 60 emulsifier 30%, polyvinylpyrrolidone 20%, starch 7.5%, and calcium silicate absorbent 17.5%.

IT **431-03-8, Diacetyl 51621-86-4,**

Sulfurane

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (amphoteric polymers for stabilization of food- and pharmaceutical-grade liqs.)

L66 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:885834 HCAPLUS
 DOCUMENT NUMBER: 136:25104
 TITLE: Peptide-containing compounds for targeting endothelial cells, compositions containing the same and methods for their use
 INVENTOR(S): Von Wronski, Mathew A.; Marinelli, Edmund R.; Nunn, Adrian D.; Pillai, Radhakrishna; Ramalingam, Kondareddiar; Tweedle, Michael F.; Linder, Karen; Nanjappan, Palaniappa; Raju, Natarajan
 PATENT ASSIGNEE(S): Bracco Research USA, USA
 SOURCE: PCT Int. Appl., 146 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091805	A2	20011206	WO 2001-US18053	20010604
WO 2001091805	A3	20020906		
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1289565	A2	20030312	EP 2001-944270	20010604
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004500854	T2	20040115	JP 2001-587817	20010604
PRIORITY APPLN. INFO.:			US 2000-585364	A2 20000602
			WO 2001-US18053	W 20010604

OTHER SOURCE(S): MARPAT 136:25104

AB The present invention provides compds. for targeting endothelial cells, tumor cells or other cells that express the neuropilin-1 (NP-1) receptor, compns. containing the same and methods for their use. The compds. are of the formula A-L-B (A = TKPPR or analog which specifically binds to an endothelial cell or cells that express markers in common with endothelial cells, with equal or greater avidity as TKPPR; L = a lipid or a non-lipid (polymer) linker; B = a substrate). Addnl., the present invention includes diagnostic, therapeutic and radiotherapeutic compns. useful for visualization, therapy or radiotherapy. For example, DPPE-glutaroyl-Gly-Thr-Lys-Pro-Pro-Arg-OH (DPPE-Glu-GTKPPR) was prepared and formulated into gas-filled microbubble compns. for ultrasonic echog. The bubbles interact with a VEGF receptor on human aortic endothelial cells (HAEC), possibly with KDR receptor, or more likely with NP-1 receptor which binds to KDR.

IT **2551-62-4, Sulfur hexafluoride**

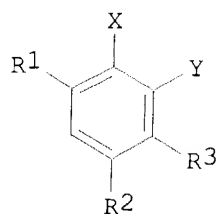
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of peptide-containing compds. and compns. for targeting endothelial cells expressing neuropilin-1 receptor for diagnosis and therapy)

L66 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:565913 HCAPLUS
 DOCUMENT NUMBER: 135:107342
 TITLE: Preparation of tetramethylpyrazine ferulate as
 platelet aggregation inhibitor and antithrombotic
 INVENTOR(S): Tan, Zaiyou
 PATENT ASSIGNEE(S): Inst. of Medicament, Guangdong Medicine College, Peop.
 Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

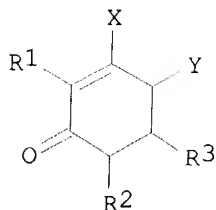
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1274722	A	20001129	CN 2000-114239	20000430
PRIORITY APPLN. INFO.:			CN 2000-114239	20000430
OTHER SOURCE(S): CASREACT 135:107342				
AB Tetramethylpyrazine ferulate is synthesized by condensing vanillin with malonic acid in pyridine under refluxing for 1 h, decomposing with HCl in ice-water, recrystg. to obtain ferulic acid; esterifying ethanol with NaNO ₂ solution in the presence of H ₂ SO ₄ to obtain Et nitrite, condensing with butanone at 40-55° to obtain diacetyl monoxime, cyclizing with NH ₄ Cl in the presence of acetic acid and Zn at 85° for 30 min, neutralizing to ph 7-8, distilling to obtain tetramethylpyrazine, and salifying with ferulic acid in acetone under refluxing. The synthetic tetramethylpyrazine ferulate is used as platelet aggregation inhibitors, antithrombotics, and antimigraine drugs , etc.				

L66 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:152647 HCAPLUS
 DOCUMENT NUMBER: 134:178470
 TITLE: Benzene derivatives substituted by aromatic ring and
 process for producing the same
 INVENTOR(S): Toya, Tetsuya
 PATENT ASSIGNEE(S): Nippon Kayaku Kabushiki Kaisha, Japan
 SOURCE: PCT Int. Appl., 148 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014336	A1	20010301	WO 2000-JP5531	20000818
W: CA, CN, IN, KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2001131121	A2	20010515	JP 2000-240642	20000809
JP 2001131114	A2	20010515	JP 2000-240757	20000809
JP 2001240590	A2	20010904	JP 2000-388349	20001221
PRIORITY APPLN. INFO.:			JP 1999-234555	A 19990820
			JP 1999-234668	A 19990820
			JP 1999-364620	A 19991222
OTHER SOURCE(S):			CASREACT 134:178470; MARPAT 134:178470	
GI				



I



II

AB Benzene derivs. substituted by an aromatic ring which are represented by general formula (I; X represents an optionally substituted benzene ring, optionally substituted naphthalene ring, optionally substituted five- or six-membered heterocycle having at least one of nitrogen, oxygen, and sulfur, or optionally substituted condensate of any of these with benzene; Y represents CO₂R₆, cyano, NO₂, SO₃R₆, SO₂NR₄R₅, SO₂R₆, or SO₂R₆; R₁, R₂, and R₃ are optionally substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-6 alkoxy, or alkylthio, NR₄R₅, halo, NO₂, cyano, COR₆, CO₂R₆, CONR₄R₅, SO₃R₆, SO₂NR₄R₅, etc.; R₄, R₅, and R₆ each represents hydrogen, optionally substituted C1-6 alkyl or Ph, or R₄ and R₅ may form a 4- to 7-membered ring) are prepared via Michael addition reaction of ketones represented by formula XCOCH₂Y (X and Y are defined as above) with α,β-unsatd. ketones represented by formula R₁CH₂COC(R₂):CHR₃ (R₁, R₂, and R₃ are defined as above) and cyclization of the resulting hexanediones represented by formula R₁CH₂COCHR₂CHR₃CH₂COX (X, Y, R₁, R₃, and R₃ are defined as above) to cyclohexenone derivs. (II; X, Y, R₁, R₃, and R₃ are defined as above). This process gives (hetero)aryl-substituted benzenes I in high yield from an inexpensive material under mild reaction conditions. I are useful as intermediates for **drugs** such as angiotensin II receptor antagonists, factor Xa inhibitors, and protease inhibitors, and those for agrochems., liquid crystals, heat-resistant polymers, and liquid crystal polymers. Thus, 35 mg EtONa was added to a solution of 1.0 g Et isonicotinoylacetate in 5 mL EtOH, followed by slowly adding dropwise 400 mg Me vinyl ketone, and the resulting mixture was stirred overnight to give 71.8% 2-isonicotinoyl-5-oxohexanoic acid Et ester. The latter **diketone** ester (978 mg) was dissolved in 20 mL PhMe, treated with 137 mg AcOH and 311 mg piperidine, and refluxed with removing water to give 2-(4-pyridyl)-4-oxocyclohex-2-ene-1-carboxylic acid Et ester which (523 mg) was reduced by 81.0 mg NaBH₄ in 5 mL MeOH at 0° for 1 h to give 68.4% 4-hydroxy-2-(4-pyridyl)cyclohex-2-ene-1-carboxylic acid Et ester. The latter compound (360 mg) was dissolved in 3 mL CH₂Cl₂ and 3 mL PhMe, treated with 0.265 mL SOCl₂ under ice-cooling, and stirred at room temperature for 1 h to give 4-chloro-2-(4-pyridyl)cyclohex-2-ene-1-carboxylic acid Et ester which (390 mg) was dissolved in 5 mL tert-butanol, treated with 246 mg t-BuOK under water-cooling, and stirred at room temperature for 1 h to give 63.5% 2-(4-pyridyl)cyclohexa-1,3-diene-1-carboxylic Et ester. This compound (100 mg) was dissolved in 1.5 mL AcOH and 1.5 mL H₂O, treated with 30 mg 5% Pd-C, and refluxed for 2 h to give a .apprx.2:1 mixture of 2-(4-pyridyl)benzoic acid Et ester and 2-(4-pyridyl)cyclohex-2-ene-1-carboxylic acid Et ester in 87.2% yield. .

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2000:796856 HCAPLUS
 TITLE: Recent advances in Coenzyme A analog synthesis.
 AUTHOR(S): Mishra, Pranab; Drueckhammer, Dale G.
 CORPORATE SOURCE: Department of Chemistry, State University of New York,
 Stony Brook, NY, 11794-3400, USA
 SOURCE: Abstracts of Papers - American Chemical Society
 (2000), 220th, ORGN-353

PUBLISHER: CODEN: ACSRAL; ISSN: 0065-7727
 American Chemical Society
 DOCUMENT TYPE: Journal; Meeting Abstract
 LANGUAGE: English

AB CoA is an essential cofactor in many biosynthetic, degradative, and energy yielding metabolic pathways. The discovery of highly selective, potent and orally active inhibitors of Coenzyme-A utilizing enzymes has been a focus in the **pharmaceutical** community over the past few years. Improvements in the enzymic methodol. for the synthesis of analogs of CoA will be presented. The larger scale synthesis of analogs will also be presented. This work employs recombinant enzymes, including the dephosphoCoA kinase that has been recently cloned and expressed in this laboratory. Also presented will be the synthesis of specific new analogs. These include a **diketone** analog of acetyl-CoA, in which the thioester **sulfur** atom is replaced with a carbonyl group and a deoxy analog, in which the hydroxyl group of the pantoate moiety is replaced with hydrogen. Thus recent advances in CoA Analog Synthesis will be discussed.

L66 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:755211 HCAPLUS
 DOCUMENT NUMBER: 133:340208
 TITLE: Novel compositions useful for delivering anti-inflammatory agents into a cell
 INVENTOR(S): Unger, Evan C.; McCreery, Thomas; Sadewasser, David A.
 PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
 SOURCE: Eur. Pat. Appl., 78 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1046394	A2	20001025	EP 2000-303249	20000418
EP 1046394	A3	20011010		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1999-294623 A 19990419

AB The present invention is directed, inter alia, to compns. and their use for delivering compds. into a cell. In a preferred embodiment, the compns. comprise, in combination with the compound to be delivered, an organic halide, a targeting ligand, and a nuclear localization sequence, optionally in the presence of a carrier. Ultrasound may be applied, if desired. The compns. are particularly suitable for the treatment of inflammatory diseases.

IT **2551-62-4, Sulfur** hexafluoride

RL: RCT (Reactant); RACT (Reactant or reagent)
 (peptide compns. useful for delivering anti-inflammatory agents into a cell)

L66 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:332298 HCAPLUS
 TITLE: Solution- and solid-phase synthesis of flavones to be tested as drugs for cystic fibrosis.
 AUTHOR(S): Springsteel, Mark F.; Niedzinski, Edmund J.; Nantz, Michael H.; Kurth, Mark J.
 CORPORATE SOURCE: Chemistry/Nantz & Kurth, U of CA, Davis, CA, 95616, USA
 SOURCE: Book of Abstracts, 219th ACS National Meeting, San Francisco, CA, March 26-30, 2000 (2000), ORGN-173.
 American Chemical Society: Washington, D. C.
 CODEN: 69CLAC

DOCUMENT TYPE: Conference; Meeting Abstract
 LANGUAGE: English

AB Cystic fibrosis is an autosomal recessive genetic disease that results in defective chloride channeling proteins. The abnormal chloride flux effects the exocrine glands, liver, lungs and other organs. Recently it has been reported that flavones stimulate chloride conductance of human airway epithelium in vivo. This report suggests flavone derivs. are an attractive structural lead in the search for new **drugs** to treat cystic fibrosis. Flavones and azaflavones have been made in solution (25-40% overall yield) and are currently being optimized on the solid phase. The solid phase work for the flavones involves a Mitsunobu coupling of 2-hydroxyacetophenone derivs. to Wang resin, followed by formation of the acetophenone enolate and acylation with benzoylchloride derivs. Finally the 1,3-**diketone** intermediate is cleaved, cyclized and eliminated in glacial acetic acid with concentrated **sulfuric** acid. Details of these reactions will be presented.

L66 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:223989 HCAPLUS

DOCUMENT NUMBER: 130:338081

TITLE: Synthesis of thiophenecarboxamides, thieno[3,4-c]pyridin-4(5H)-ones and thieno[3,4-d]pyrimidin-4(3H)-ones and preliminary evaluation as inhibitors of poly(ADP-ribose)polymerase (PARP)

AUTHOR(S): Shinkwin, Anne E.; Whish, William J. D.; Threadgill, Michael D.

CORPORATE SOURCE: Department of Pharmacy and Pharmacology, University of Bath, Bath, BA2 7AY, UK

SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(2), 297-308
 CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Inhibitors of poly(ADP-ribose)polymerase (PARP) inhibit repair of damaged DNA and thus potentiate **radiotherapy** and **chemotherapy** of cancer. Treatment of 3-cyanothiophene with potassium nitrate and concentrated **sulfuric** acid gave 5-nitrothiophene-3-carboxamide. 4-Nitrothiophene-2-carboxamide and 5-nitrothiophene-2-carboxamide were formed similarly from 2-cyanothiophene. Reduction with tin(II) chloride gave the corresponding aminothiophenecarboxamide salts which were isolated via their N-Cbz derivs. Lithiation of 3,4-dibromothiophene at -116°C and quenching with alkyl chloroformates gave 4-bromothiophene-3-carboxylates, which were hydrolyzed to 4-bromothiophene-3-carboxylic acid. Hurdley reactions with the enolates of 2,4-pentanedione and of 1-phenyl-1,3-**butanedione**, followed by acyl cleavage, led to 4-(2-oxopropyl)thiophene-3-carboxylic acid and 4-phenacylthiophene-3-carboxylic acid, resp. Condensation with ammonia in acetic acid gave 6-methyl- and 6-phenyl-thieno[3,4-c]pyridin-4-ones, which were selectively nitrated at the 1- and 7-positions or were dinitrated. Et 4-acetamido- and 4-benzamido-thiophene-3-carboxylates were cyclized to 2-methyl- and 2-phenyl-thieno[3,4-d][1,3]oxazin-4-ones, resp. Ring-opening with ammonia and recyclization led to 2-substituted thieno[3,4-d]pyrimidin-4-ones. The aminothiophenecarboxamides are analogs of 3-aminobenzamide, a selective inhibitor of poly(ADP-ribose)polymerase (PARP); the thienopyrimidinones and the thienopyrimidinones are analogs of isoquinolin-1-ones and quinazolin-4-ones, resp., which inhibit this enzyme. In preliminary assays, several thienopyrimidinones and thienopyrimidinones showed potent inhibitory activity against PARP.

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:766508 HCAPLUS
 DOCUMENT NUMBER: 130:29222
 TITLE: Acoustically active drug delivery systems comprising a gas or gaseous precursor filled microsphere
 INVENTOR(S): Unger, Evan C.
 PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
 SOURCE: PCT Int. Appl., 156 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851284	A1	19981119	WO 1998-US9569	19980512
W: AU, BR, CA, CN, JP, KR, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6416740	B1	20020709	US 1998-75343	19980511
AU 9877961	A1	19981208	AU 1998-77961	19980512
EP 981333	A1	20000301	EP 1998-926033	19980512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001524983	T2	20011204	JP 1998-549372	19980512
US 2002159952	A1	20021031	US 2002-84855	20020227
US 2004091541	A1	20040513	US 2003-622027	20030716

PRIORITY APPLN. INFO.:

US 1997-46379P	P	19970513
US 1998-75343	A	19980511
US 1998-75477	B3	19980511
WO 1998-US9569	W	19980512
US 2001-828762	B1	20010409

AB The present invention is directed to targeted therapeutic delivery systems comprising a gas or gaseous precursor filled microsphere wherein said gas or gaseous precursor filled microsphere comprises an oil, a surfactant, and a therapeutic compound. Methods of preparing the targeted therapeutic delivery systems are also embodied by the present invention which comprise processing a solution comprising an oil and a surfactant in the presence of a gaseous precursor, at a temperature below the gel to liquid crystalline phase transition temperature of the surfactant to form gas or gaseous precursor filled microsphere, and adding to said microspheres a therapeutic compound resulting in a targeted therapeutic delivery system, wherein said processing is selected from the group consisting of controlled agitation, controlled drying, and a combination thereof. Thus, 1.5 mL of MRX115 precursor was mixed with 320 μ L soybean oil followed by addition of dipalmitoyl phosphoethanolamine to the soybean oil at a concentration of 0.5 mg/mL. The mixture was placed into a vial and the headspace removed and replaced with perfluorobutane and was shaken for 60 s. The acoustically active lipospheres thus obtained had particle size of 1.67-3.49 μ m.

IT 373-80-8 421-83-0, Methanesulfonylchloride-trifluoro 2551-62-4, Sulfur hexafluoride 5714-22-7, Sulfur fluoride (S2F10)

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acoustically active drug delivery systems comprising gas or gaseous precursor filled microsphere)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1997:85497 HCAPLUS
 DOCUMENT NUMBER: 126:135617
 TITLE: Method of preparing gas and gaseous precursor-filled microspheres

INVENTOR(S): Unger, Evan C.; Fritz, Thomas A.; Matsunaga, Terry;
 Ramaswami, Varadarajan; Yellowhair, David; Wu, Guanli
 PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
 SOURCE: U.S., 42 pp., Cont.-in-part of U.S. Ser. No. 160,232,
 abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 21
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5585112	A	19961217	US 1993-159687	19931130
US 5088499	A	19920218	US 1990-569828	19900820
WO 9109629	A1	19910711	WO 1990-US7500	19901219
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AT 180170	E	19990615	AT 1991-902857	19901219
ES 2131051	T3	19990716	ES 1991-902857	19901219
JP 3309356	B2	20020729	JP 1991-503276	19901219
JP 05502675	T2	19930513		
US 5228446	A	19930720	US 1991-717084	19910618
WO 9222247	A1	19921223	WO 1992-US2615	19920331
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9220020	A1	19930112	AU 1992-20020	19920331
AU 667471	B2	19960328		
JP 06508364	T2	19940922	JP 1993-500847	19920331
JP 3456584	B2	20031014		
EP 616508	A1	19940928	EP 1992-912456	19920331
EP 616508	B1	20010718		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
AT 203148	E	20010815	AT 1992-912456	19920331
ES 2159280	T3	20011001	ES 1992-912456	19920331
US 5469854	A	19951128	US 1993-76239	19930611
US 5348016	A	19940920	US 1993-88268	19930707
US 5542935	A	19960806	US 1993-160232	19931130
US 5769080	A	19980623	US 1994-199462	19940222
CA 2164846	AA	19941222	CA 1994-2164846	19940519
WO 9428874	A1	19941222	WO 1994-US5633	19940519
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9469537	A1	19950103	AU 1994-69537	19940519
AU 696056	B2	19980827		
JP 08511523	T2	19961203	JP 1995-501811	19940519
EP 802788	A1	19971029	EP 1994-918051	19940519
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
CA 2164845	AA	19941222	CA 1994-2164845	19940520
WO 9428780	A2	19941222	WO 1994-US5792	19940520
WO 9428780	A3	19950202		
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9470431	A1	19950103	AU 1994-70431	19940520
AU 683900	B2	19971127		
EP 712293	A1	19960522	EP 1994-919208	19940520
EP 712293	B1	20030305		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08511526	T2	19961203	JP 1995-501839	19940520
EP 1252885	A2	20021030	EP 2002-78168	19940520
EP 1252885	A3	20030416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 233574	E	20030315	AT 1994-919208	19940520

PT 712293	T	20030731	PT 1994-919208	19940520
ES 2193161	T3	20031101	ES 1994-919208	19940520
US 5773024	A	19980630	US 1994-307305	19940916
US 5733572	A	19980331	US 1994-346426	19941129
CA 2177713	AA	19950608	CA 1994-2177713	19941130
WO 9515118	A1	19950608	WO 1994-US13817	19941130
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 740528	A1	19961106	EP 1995-908414	19941130
EP 740528	B1	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09506098	T2	19970617	JP 1995-515763	19941130
AT 235228	E	20030415	AT 1995-908414	19941130
US 5922304	A	19990713	US 1995-401974	19950309
US 5705187	A	19980106	US 1995-417238	19950405
US 5571497	A	19961105	US 1995-468056	19950606
US 5853752	A	19981229	US 1995-487230	19950606
US 5656211	A	19970812	US 1995-482294	19950607
US 6443898	B1	20020903	US 1995-485998	19950607
CN 1180310	A	19980429	CN 1996-193069	19960327
CN 1102045	B	20030226		
US 5776429	A	19980707	US 1996-643070	19960430
US 6001335	A	19991214	US 1996-665719	19960618
US 6146657	A	20001114	US 1996-741598	19961101
US 5935553	A	19990810	US 1996-758179	19961125
US 6039557	A	20000321	US 1997-833489	19970407
US 5985246	A	19991116	US 1997-888426	19970708
US 6071495	A	20000606	US 1997-942862	19971002
US 6033646	A	20000307	US 1998-26326	19980219
AU 9856271	A1	19980507	AU 1998-56271	19980224
AU 713127	B2	19991125		
US 6551574	B1	20030422	US 1998-52075	19980331
US 6479034	B1	20021112	US 1998-118329	19980717
AU 9888406	A1	19990204	AU 1998-88406	19981009
AU 732440	B2	20010426		
AU 9888405	A1	19981203	AU 1998-88405	19981012
AU 731072	B2	20010322		
HK 1013625	A1	20000420	HK 1998-114978	19981223
AU 9910043	A1	19990304	AU 1999-10043	19990104
GR 3036877	T3	20020131	GR 2001-401740	20011011
US 2003039613	A1	20030227	US 2002-108284	20020326
US 2002150539	A1	20021017	US 2002-113577	20020402
US 2003003055	A1	20030102	US 2002-213600	20020806

PRIORITY APPLN. INFO.:

US 1989-455707	B2	19891222
US 1990-569828	A2	19900820
US 1991-716899	B2	19910618
US 1991-717084	A2	19910618
US 1993-76239	A2	19930611
US 1993-159674	B2	19931130
US 1993-160232	B2	19931130
US 1990-581027	A2	19900911
WO 1990-US7500	W	19901219
US 1991-716793	A	19910618
US 1991-750877	A3	19910826
US 1992-818069	A3	19920108
WO 1992-US2615	A	19920331
US 1992-967974	A3	19921027
US 1993-17683	A3	19930212
US 1993-18112	B3	19930217
US 1993-76250	A2	19930611
US 1993-85608	A3	19930630
US 1993-88268	A3	19930707
US 1993-159687	A2	19931130

US 1993-163039	A3 19931206
US 1994-212553	B2 19940311
AU 1994-69537	A3 19940519
AU 1994-70416	A3 19940519
WO 1994-US5633	W 19940519
EP 1994-919208	A3 19940520
WO 1994-US5792	W 19940520
US 1994-307305	A2 19940916
US 1994-346426	A 19941129
AU 1995-21850	A3 19941130
WO 1994-US13817	W 19941130
US 1995-395683	A3 19950228
US 1995-401974	A2 19950309
US 1995-468056	A3 19950606
US 1995-471250	A3 19950606
US 1995-487230	A3 19950606
US 1995-482294	A3 19950607
US 1995-485998	A3 19950607
US 1996-643070	A3 19960430
US 1996-665719	A3 19960618
US 1996-741598	A3 19961101
US 1997-796798	A3 19970206
US 1998-118329	A3 19980717

AB Methods of and apparatus for preparing temperature activated gaseous precursor-filled liposomes are described. Gaseous precursor-filled liposomes prepared by these methods are particularly useful, for example, in ultrasonic imaging applications and in therapeutic drug delivery systems. A lipid solution containing 83:8:5 molar ratio of dipalmitoylphosphatidylcholine, dipalmitoylphosphatidylethanolamine bearing PEG, and dipalmitoylphosphatidic acid in 8:1:1 PBS, glycerol, and propylene glycol and perfluorobutane were placed in a microfluidizer and subjected to 20 passes at 16,000 psi at -20°. Limited size vesicles, having a size of 30-50 nm, resulted and upon warming to room temperature, stabilized microspheres of 10 µm resulted.

IT **2551-62-4, Sulfur hexafluoride**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (temperature-activated gaseous precursor-filled liposomes for ultrasound imaging contrast agents and **drug** delivery agents)

L66 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:675127 HCAPLUS

DOCUMENT NUMBER: 123:228229

TITLE: Tartaric acid derivatives of substituted dibenzoxazepine compounds, pharmaceutical compositions and methods of use as analgesics and prostaglandin-E2 antagonists

INVENTOR(S): Chandrakumar, Nizal S.; Mueller, Richard A.

PATENT ASSIGNEE(S): G. D. Searle and Co., USA

SOURCE: U.S., 19 pp.
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

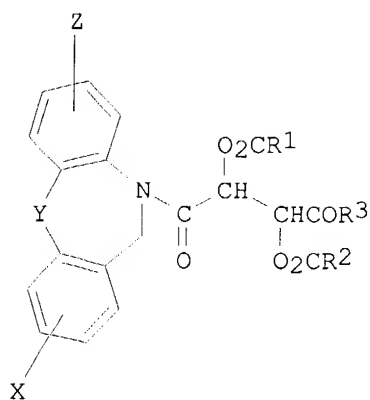
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5424424	A	19950613	US 1993-134345	19931007
US 5604220	A	19970218	US 1995-407512	19950314
			US 1993-134345	19931007

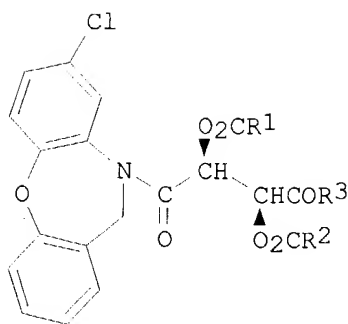
PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 123:228229

GI



I



II

AB The present invention provides substituted dibenzoxazepine compds. I [or a pharmaceutically-acceptable salt thereof, wherein: X is hydrogen or halogen; Y is oxygen, **sulfur**, SO or SO₂; Z is hydrogen, halogen or CF₃; R₁, R₂ and R₄ may be the same or different, and are hydrogen or alkyl; R₃ is OH, Oalkyl or NR₄-alkylene-R₅; and R₅ is NR₁R₂ or aryl] which are useful as analgesic agents for the treatment of pain, and as prostaglandin-E₂ antagonists for the treatment of prostaglandin-E₂ mediated diseases, pharmaceutical compns. comprising a therapeutically-effective amount of I in combination with a pharmaceutically-acceptable carrier, a method for eliminating or ameliorating pain in an animal, and a method for treating prostaglandin-E₂ mediated diseases in an animal, comprising administering a therapeutically-effective amount of I to the animal. Thus, e.g., amidation of αS,βS-bis(acetyloxy)-8-chloro-γ-oxodibenz[b,f][1,4]oxazepine-10(11H)-butanoic acid (preparation given) with 3-(aminomethyl)pyridine followed by HCl treatment afforded the N-(3-pyridylmethyl)butanamide II.HCl (R₁ = R₂ = Me, R₃ = NHCH₂-3-pyridyl) which produced analgesia in 9/10 mice in the writhing assay and demonstrated PGE antagonism with an EC₅₀ dose ratio of 0.74.

L66 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:83384 HCAPLUS

DOCUMENT NUMBER: 116:83384

TITLE: Manufacture of optically active 3-phenylglycidic acid esters

INVENTOR(S): Kawai, Akiyoshi; Inoue, Hirozumi

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

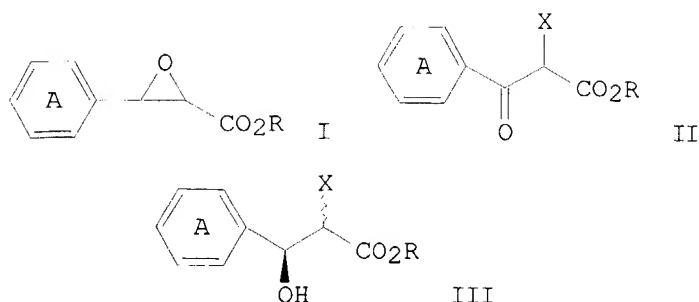
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03190865	A2	19910820	JP 1989-333175	19891221
JP 06060169	B4	19940810		

PRIORITY APPLN. INFO.: JP 1989-333175 19891221

OTHER SOURCE(S): CASREACT 116:83384; MARPAT 116:83384

GI



AB Title esters I (R = lower alkyl; ring A may be substituted), useful as intermediates for **pharmaceuticals**, are manufactured by asym. reduction of II (X = halo) with a metal hydride in the presence of an optically active amino acid derivative and a lower aliphatic alc. to III followed by intramol. ring closure. Thus, reduction of 728 mg 2-chloro-3-oxo-3-(4-methoxyphenyl)propionic acid Me ester with LiBH₄ in the presence of N,N'-**dibenzoyl**-L-cystine and Me₃COH in THF under N at -65° to -70° gave 660 mg mixture of (2R,3S)- and (2S,3S)-2-chloro-3-hydroxy-3-(4-methoxyphenyl)propionic acid Me ester, which was dissolved in MeOH and stirred with NaOMe at 0° and then at room temperature to give 506 mg (2R,3S)-3-(4-methoxyphenyl)glycidic acid Me ester.

IT **7791-25-5, Sulfuryl** chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination with, of oxo(methoxyphenyl)propionic acid Me ester)

L66 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:406925 HCAPLUS

DOCUMENT NUMBER: 111:6925

TITLE: Preparation of chlorodiacetyl as material for drugs and agrochemicals

INVENTOR(S): Imuda, Junichi; Ono, Hiroyasu; Tan, Hiroaki; Kihara, Noriaki

PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63222140	A2	19880916	JP 1987-53050	19870310
JP 03014815	B4	19910227		

PRIORITY APPLN. INFO.: JP 1987-53050 19870310

AB The title compound (I) is prepared by chlorination of diacetyl by SO₂Cl₂ in the presence of a compound selected from H₂O, alcs., or phenols. A solution of diacetyl and isopropanol in C₂H₄Cl₂ was treated dropwise with SO₂Cl₂ over 3 h at 60° then the mixture was stirred at the same temperature for 8 h to give 66% I, vs., 1.4% without isopropanol and 1.4% by treating diacetyl and SO₂Cl₂ in HCl-containing C₂H₄Cl₂.

IT **7791-25-5, Sulfuryl** chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination by, of diacetyl)

L66 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

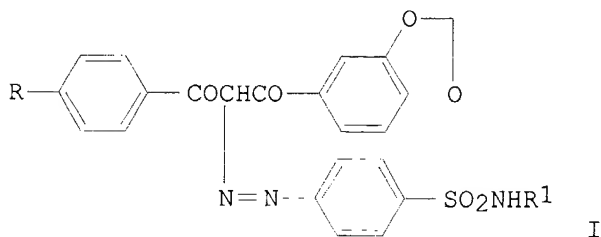
ACCESSION NUMBER: 1988:223470 HCAPLUS

DOCUMENT NUMBER: 108:223470
 TITLE: Manufacture of 2,6-dichloroacetanilide
 INVENTOR(S): Domnariu, Marioara; Kovendi, Alexandru; Dasoveanu, Mihaela; Szasz, Doina; Radu, Ana
 PATENT ASSIGNEE(S): Intreprinderea de Medicamente "Terapia", Rom.
 SOURCE: Rom., 2 pp.
 CODEN: RUXXA3
 DOCUMENT TYPE: Patent
 LANGUAGE: Romanian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 92494	B1	19871030	RO 1985-118749	19850515
PRIORITY APPLN. INFO.:			RO 1985-118749	19850515

AB 2,6-Dichloroacetanilide (I) of good purity, useful as an intermediate in the manufacture of Diclofenac sodium **pharmaceutical**, is prepared in high yields by acetylation of 2,6-dichloroaniline(II) with Ac₂O in the presence of H₂SO₄ catalyst in C₆H₆, followed by hydrolysis of **diacetyl** derivative byproduct with 25% NH₃ solution at 40°. Stirring 1.1 kg II, 8.1 kg C₆H₆, 1.02 L Ac₂O, and 0.005 L H₂SO₄ 2 h at reflux, cooling to 25°, adding 0.65 L water to hydrolyze excess Ac₂O, cooling to 20-25°, adding 1.4 L 25% NH₃ solution in such a way that the temperature remained below 35-40° with stirring, stirring the mixture 4 h at 40° and 16 h at room temperature, adding 10 L cold water with stirring, filtering, washing the precipitate with water, and drying gave 85% white I crystals with m.p. 169-173°.

L66 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1983:594913 HCAPLUS
 DOCUMENT NUMBER: 99:194913
 TITLE: Synthesis and spectral studies of some potential antimicrobial diazo-diaryl 1,3-diketones. Part II
 AUTHOR(S): Bhagwan, J.; Joshi, Y. C.; Tyagi, R. P.; Joshi, B. C.; Mangal, H. N.
 CORPORATE SOURCE: Dep. Chem., Univ. Rajasthan, Jaipur, 302 004, India
 SOURCE: Journal of the Institution of Chemists (India) (1983), 55(2), 58-60
 CODEN: JOICA7; ISSN: 0020-3254
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 99:194913
 GI



AB The title compds. I (R = H, Me, OMe, F, Cl, Br; R₁ = sulfa **drug** residue) (72 compds.) were prepared by diazotizing sulfa compds. and reaction with the **diketone**. I had moderate bactericidal activity (no data).
 IT 144-82-1

RL: PRP (Properties)

(diazotization and coupling of, with dibenzoylmethane derivs.)

L66 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1967:464901 HCAPLUS

DOCUMENT NUMBER: 67:64901

TITLE: Method of cleaving S-S bonds in organic compounds
using metal organic compounds

INVENTOR(S): Wang, Chi Hua

PATENT ASSIGNEE(S): Little, Arthur D., Inc.

SOURCE: U.S., 3 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3328368		19670627	US	19630520

AB Disulfide linkages are cleaved in solution by a redox system consisting of a β - diketone chelate or a metallocene, giving thiyl radicals and mercaptide ions. Thus, 10 g. of acrylonitrile and 20 mg. of an organometallic compound were placed in 1 arm of a double-arm tube, and 20 mg. of disulfide dissolved in MeOH were placed in the other arm. The tube was evacuated to 10-2 mm., and the 2 solns. were mixed. Polymerization was indicated by the appearance of turbidity (disulfide, organometallic compound, and turbidity given): PhSSPh, dicyclopentadienyliron (I), yes; PhSSPh, vanadium acetylacetonate (II), yes; lipoic acid (III), II, yes; di-p-tolyl disulfide, dicyclopentadienylcobalt, yes; naphthacene tetrasulfide, I, yes; di-n-heptyl disulfide, II, yes; -, I, no; III, -, number The free radicals produced by this system can also be used in biol. research for the study of crosslinking in proteins, radiation protection, and applications in **chemotherapy**. This method is simpler than the prior processes of photodissocn. and thermal dissociation, and does not require an energy input.

IT 16734-12-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(cleavage of, catalysts for, metal complexes as)

L66 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1966:429492 HCAPLUS

DOCUMENT NUMBER: 65:29492

ORIGINAL REFERENCE NO.: 65:5470b-h

TITLE: Thiamine-pantethine disulfides

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd.

SOURCE: 5 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1418664		19651119	FR	

PRIORITY APPLN. INFO.: JP 19631226

GI For diagram(s), see printed CA Issue.

AB Thiamine-pantethine disulfides (I), where R, R1, and R2 are H or acyl radicals with 1 to 7 C atoms, and with **pharmacological** properties are prepared as follows: a solution of 1.6 g. Na2S2O3.5H2O in 10 cc. EtOH is added slowly to a solution of 2.4 g. γ -benzoylpantethine ethylenimide in 10 cc. EtOH, and then 3.2 cc. 2N HCl are added. The solution is evaporated in vacuo, and the residue extracted with EtOH to give 1.9 g. sodium

salt of γ -benzoyl-S-sulfopantethine (II). A solution of 2.9 g. NaOH in 8 cc. water is added to a solution of 8.1 g. thiamine chloride HCl (III) in 10 cc. H₂O, saturated with NaCl and mixed with a solution of 11.5 g. II in H₂O, and stirred 15 min. The resinous precipitate is extracted with 200 cc. CHCl₃. The extract is washed with H₂O, extracted with diluted HCl and made alkaline with NaHCO₃, and the precipitate is again extracted with CHCl₃ to give 7.2 g. thiamine- γ -benzoylpantethine disulfide (IV). A solution of 3.6 g. NaOH in 10 cc. H₂O is added to a solution of 10 g. III in 15 cc. H₂O. Then 16 g. sodium salt of α -acetyl- γ -benzoyl-S-sulfopantethine is added with stirring and the precipitate is extracted with 150 cc. CHCl₃ to give 10.5 g. thiamine- α -acetyl- γ -benzoylpantethine disulfide, m. 85°. A solution of 1.7 g. III in 5 cc. H₂O is treated with 6 cc. 10% aqueous NaOH and kept 30 min. and saturated with NaCl, mixed with 2.3 g. Et₃N salt of S-sulfopantethine, and 30 cc. BuOH, and stirred 15 min. The BuOH layer is treated with ether to give a precipitate of a mixture of pantethine, thiamine-pantethine disulfide, and thiamine disulfide, which is chromatographed over silica gel with 1:1 Me₂CO-MeOH to give pure thiamine-pantethine disulfide. A solution of 3.4 g. III in 5 cc. H₂O is treated with 12 cc. 10% aqueous NaOH and kept 30 min., saturated with NaCl, mixed with 4.6 g. sodium salt of α,γ -diacetyl-S-sulfopantethine, and 30 cc. EtOAc, and stirred 10 min. The EtOAc layer is washed with H₂O and extracted with 2N HCl which extract is neutralized with NaHCO₃ and extracted with EtOAc to give thiamine- α,γ -diacetylpantethine disulfide. A solution of 30% H₂O₂ is added to a solution of 7 g. γ -benzoylpantethine (V) in 30 cc. AcOH, cooled 1 hr. at 0°, and kept overnight. The mixture is poured into H₂O, neutralized with NaHCO₃, and extracted with CHCl₃, to give 6 g. γ -benzoylpantethine sulfoxide, which in 50 cc. 50% aqueous EtOH is mixed with a solution of 2.8 g. III in 15 cc. H₂O, and 1 cc. 10% aqueous NaOH. The mixture is kept overnight, the EtOH stripped and the aqueous solution is diluted with more H₂O and extracted

with

CHCl₃. The extract is treated as before with HCl to give IV. A solution of 8.5 g. V in 100 cc. MeOH is mixed with 4 cc. 10% NaOH and 100 cc. H₂O and the resulting solution is added to a mixture of 3.4 g. thiamine chloride, 12 cc. 10% aqueous NaOH, and 200 cc. H₂O. The resulting mixture is stirred while a solution of 20 g. iodine, 14 g. KI, and 200 cc. H₂O is added slowly to it and then extracted with CHCl₃. The extract is washed with aqueous NaHSO₃, H₂O, and treated with HCl as before to give IV. A solution of 5.8 g. O-acetylthiamine HCl, 5 cc. H₂O, and 12 cc. 10% NaOH is mixed with a solution of 5 g. II in 5 cc. H₂O to give 3 g. O-acetylthiamine- γ -benzoylpantethine disulfide. A solution of 4.4 g. O-benzoylthiamine HCl, 5 cc. H₂O, and 12 cc. 10% NaOH is mixed with a solution of 5 g. II in 5 cc. H₂O. The mixture is stirred and extracted with 30 cc. CHCl₃. The extract is washed with H₂O, dried and evaporated in vacuo. The residue is treated with 50 cc. Et₂O. The precipitate is filtered off, and extracted with diluted aqueous HCl. The acidic extract is filtered and neutralized with NaHCO₃ to give a precipitate which is extracted with CHCl₃ and treated as before to give 2 g. O-benzoylthiamine- γ -benzoylpantethine disulfide.

L66 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1963:409045 HCAPLUS

DOCUMENT NUMBER: 59:9045

ORIGINAL REFERENCE NO.: 59:1658b-d

TITLE: Sulfur-containing purine and pteridine compounds

PATENT ASSIGNEE(S): Wellcome Foundation Ltd.

SOURCE: 3 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GB 920267 19630306 GB
 PRIORITY APPLN. INFO.: US 19580516

GI For diagram(s), see printed CA Issue.

AB Inhibitors of microbial growth, some of which suppress neoplastic growth and have **pharmacol.** activity on the mammalian circulatory system are prepared by treating a chlorine-substituted derivative with an anion (SY)-, or treating a 4,5-diamino-6-mercaptopyrimidine with an α -**diketone**. Thus, 4 g. 4,5-diamino-6-mercaptopyrimidine was treated with 2.5 ml. **diacetyl** to form 4.7 g. 4-mercapto-6,7-dimethylpteridine, λ 258, 382 m μ at pH 1 and 265, 390 m μ at pH 11. Also prepared were 2-amino-4-mercaptopteridine (I), λ 245, 282, 372 m μ at pH 1 and 280, 330, 405 m μ at pH 11; 4-mercapto-7-hydroxypteridine, λ 248, 330 m μ at pH 1, 250, 313 m μ at pH 11. 2-Amino-6-chloro-8-hydroxypurine was treated with 2N sodium hydrosulfide to yield 2-amino-6-mercapto-8-hydroxypurine (II), λ 251, 350 m μ at pH 1 and 239, 325 m μ at pH 11; others prepared include 6-(4-chlorophenylthio)purine, m. 265-7° (decomposition), λ 250, 292 m μ at pH 1, 294 m μ at pH 11; 6-(2-methylphenylthio)purine, m. 161-3° (decomposition), λ 295 m μ at pH 1, 293 m μ at pH 11; 6-(3-methylphenylthio)purine, m. 214-15° (decomposition), λ 295 m μ at pH 1, 293 m μ at pH 11; 6-(4-methylphenylthio)purine, m. 239-40° (decomposition), λ 295 m μ at pH 1, 293 m μ at pH 11.

L66 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1954:60564 HCAPLUS

DOCUMENT NUMBER: 48:60564

ORIGINAL REFERENCE NO.: 48:10771i,10772a

TITLE: **Sulfur-containing β -dicarbonyl compounds**

INVENTOR(S): Bohme, Horst

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 867394		19530216	DE	

AB α -Halogenated thio ethers with monosubstituted β -**diketones** or β -keto carboxylic esters or their salts give S-containing β -dicarbonyl compns. useful as solvents, perfumes, pesticides, softeners, or intermediates of the manufacture of **pharmaceutical** agents. BzCHMeAc (7.8 g.) dropped with stirring on 1 g. Na wire under 100 cc. Et₂O to produce, with H evolution, the Et₂O-soluble Na salt; 4.3 g. ClCH₂SMe (I) is then added, the mixture heated 2 hrs. on the steam bath, the NaCl removed by addition of water, and the Et₂O solution dried over CaCl and fractionated to give 5.5 g. MeBz(MeSCH₂)CAc, b₁₁ 180°, AcPh(MeSCH₂)CCO₂Et, b₁₁ 178-80°, is similarly prepared from I and AcCHPhCO₂Et.

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L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?
 L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI
 L3 SEL PLU=ON L1 1- CHEM : 210 TERMS
 L4 37613 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L5 54254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR ?DIKETONE?
 L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
 L7 1818 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L5
 L9 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?ANESTHE? OR ?HISTAMIN

E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
 ?OINTMENT? OR URGENT? OR ?ITCH?)
 L10 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT (FLAVOR? OR CREAM(W) BUT
 TER OR FOOD#)
 L13 STR

O:---C---C---O
 1 2 3 4

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L15 SCR 1838
 L17 12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15
 L18 117304 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
 L20 1606 SEA FILE=REGISTRY ABB=ON PLU=ON COLLOID? OR SUSPENSION? OR
 DISPERS?
 L21 1941897 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR COLLOID? OR SUSPENSION?
 OR DISPERS?
 L22 140971 SEA FILE=HCAPLUS ABB=ON PLU=ON L21(L)L6
 L29 6235 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L18
 L30 654 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND L22
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 ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT?
 OR URGENT? OR ?ITCH?)
 L32 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND L30
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 FLAVOR? OR FOOD#)
 L58 151635 SEA FILE=HCAPLUS ABB=ON PLU=ON ?DIONE
 L59 485 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L22
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 OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)
 L64 848 SEA FILE=HCAPLUS ABB=ON PLU=ON L5(L) (?PHARM? OR ?THERAP? OR
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 L68 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 AND L7
 L69 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L68 NOT (L10 OR L34 OR L60 OR
 L66)

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=> d ibib abs hitrn 169 1-3

L69 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:100971 HCAPLUS
 DOCUMENT NUMBER: 140:169245
 TITLE: Non-amphoteric glutathione derivative compositions for
 topical application
 INVENTOR(S): Yu, Ruey J.; Van Scott, Eugene J.
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 29 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004010968	A1	20040205	WO 2003-US24048	20030731
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-400252P P 20020731
 US 2003-626158 A 20030724

AB Topical compns. and methods including non-amphoteric derivs. of glutathione, for example, N-acyl-glutathiones, N-acyl-glutathione amides, and N-acyl-glutathione esters are disclosed for use in the treatment and prevention of cosmetic conditions and dermatol. disorders, are disclosed. The non-amphoteric glutathione derivs. may have the structure of (I): R' -COCHNH (R2) H2CH2CONHCH(CH2SR3) CONHCH2 CO-R' wherein R' is independently selected from -OH, -NH2, -NHNH2, an alkoxyl group, an aralkoxyl group, and an aryloxyl group and R2 and R3 are each independently selected from a hydrogen atom or an acyl group, but if at least one R' is -OH, -NH2, or -NHNH2, then R2 is an acyl group.

IT 7446-34-6, Selenium sulfide 7704-34-9, Sulfur, biological studies

RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(non-amphoteric glutathione derivative compns. for topical application)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:300448 HCAPLUS

DOCUMENT NUMBER: 134:294926

TITLE: Use of N,N'-(3,3-dimethylbutyl)-L- α -aspartyl-L-phenylalanine 1-methyl ester (neotame) to modify mouthfeel perception

INVENTOR(S): Walters, Gale C.; Hatchwell, Leora C.; Gerlat, Paula A.; Ferraro, Karen L.

PATENT ASSIGNEE(S): The Nutrasweet Company, USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001028362	A1	20010426	WO 2000-US28734	20001018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,				

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-160304P P 19991019

AB Addition of neotame to food formulations improves mouthfeel. Thus, addition of 2 ppm neotame to an aqueous solution containing 25 ppm spearmint oil imparted a rounder mouthfeel.

IT **137-00-8, Sulfurol 431-03-8, Diacetyl**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (neotame modification of mouthfeel)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:441571 HCAPLUS

DOCUMENT NUMBER: 133:57991

TITLE: Use of N-neohexyl- α -aspartyl-L-phenylalanine methyl ester as a flavor modifier

INVENTOR(S): Gerlat, Paula A.; Hatchwell, Leora C.; Walters, Gale C.; Miraglio, Angela; Sawyer, Harold A.

PATENT ASSIGNEE(S): The Nutrasweet Company, USA

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000036933	A1	20000629	WO 1999-US29851	19991217
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 2003008046	A1	20030109	US 1999-465837	19991217

PRIORITY APPLN. INFO.: US 1998-112948P P 19981218

AB This invention relates to the use of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-Me ester, or neotame, as a flavor (taste and/or aroma) modifier in foods, cosmetics and drugs, and compns. containing the same.

IT **137-00-8, Sulfurol 431-03-8, 2, 3-Butanedione**

RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (use of N-neohexyl- α -aspartyl-L-phenylalanine Me ester as a flavor and aroma modifier)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d stat que 172

L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?

L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI

L3 SEL PLU=ON L1 1- CHEM : 210 TERMS
 L4 37613 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L5 54254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR ?DIKETONE?
 L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
 L7 1818 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L5
 L9 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?ANESTHE? OR ?HISTAMIN
 E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
 ?OINTMENT? OR URGENT? OR ?ITCH?)
 L10 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT (FLAVOR? OR CREAM(W) BUT
 TER OR FOOD#)
 L13 STR

$$\begin{array}{ccccccc} \text{O} & \text{---} & \text{C} & \text{---} & \text{C} & \text{---} & \text{O} \\ 1 & & 2 & & 3 & & 4 \end{array}$$

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
 L15 SCR 1838
 L17 12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15
 L18 117304 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
 L20 1606 SEA FILE=REGISTRY ABB=ON PLU=ON COLLOID? OR SUSPENSION? OR
 DISPERS?
 L21 1941897 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR COLLOID? OR SUSPENSION?
 OR DISPERS?
 L22 140971 SEA FILE=HCAPLUS ABB=ON PLU=ON L21(L) L6
 L29 6235 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L18
 L30 654 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND L22
 L31 482726 SEA FILE=HCAPLUS ABB=ON PLU=ON (?ANESTHE? OR ?HISTAMINE? OR
 ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT?
 OR URGENT? OR ?ITCH?)
 L32 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND L30
 L33 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 NOT L10
 L34 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 NOT (CREAM(W) BUTTER OR
 FLAVOR? OR FOOD#)
 L58 151635 SEA FILE=HCAPLUS ABB=ON PLU=ON ?DIONE
 L59 485 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L22
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 OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)
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 ?MEDICAL? OR ?DRUG? OR ?COSMET?)
 L65 29 SEA FILE=HCAPLUS ABB=ON PLU=ON L64 AND L6
 L66 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 NOT (L10 OR L34 OR L60)
 L67 101410 SEA FILE=HCAPLUS ABB=ON PLU=ON "DRUG DELIVERY SYSTEMS"/CV
 L70 4094 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L6
 L71 32 SEA FILE=HCAPLUS ABB=ON PLU=ON L70 AND L67
 L72 27 SEA FILE=HCAPLUS ABB=ON PLU=ON L71 NOT (L10 OR L34 OR L60 OR
 L66)

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L72 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:472319 HCAPLUS

TITLE: **Sulfur heterocycle-condensed pyrimidinedione derivatives, prodrugs of them, JNK inhibitors containing them, and pharmaceuticals containing them**

INVENTOR(S): Ito, Fumio; Kimura, Hiroyuki; Ikata, Hideki; Kitamura, Shuji; Kawamoto, Tomohiro; Abe, Hidenori

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 117 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004161716	A2	20040610	JP 2002-332027	20021115

PRIORITY APPLN. INFO.: JP 2002-332027 20021115

AB The derivs., useful for prevention and treatment of diseases involving JNK, e.g. cardiac failure, hypertension, rheumatoid arthritis, asthma, Alzheimer's disease, ischemia, etc., are represented by I [R = H, (un)substituted hydrocarbonyl, (un)substituted heterocyclyl; X1, X2 = (un)substituted C2-4 alkylene; X3 = direct bond, (un)substituted C1-5 alkylene, (un)substituted C2-4 alkenylene; Y = direct bond, (un)substituted divalent cyclic group; Q = direct bond, O, S, NR1 [R1 = H, (un)substituted lower alkyl]; L = direct bond, CONR2 [R2 = H, (un)substituted lower alkyl]; ring A = (un)substituted N-heterocycle; n = 0, 1, 2]. JNK inhibitors contain I, their salts, or prodrugs of I. Thus, IC50 of 4-(6-aminopyridin-3-yl)-N-[3-(1,1,6,8-tetraoxo-9-phenyl-1,3,4,8-tetrahydro-2H-1 λ 6-pyrimido[6,1-b][1,3]thiazin-7-yl)propyl]benzamide hydrochloride (II preparation given) against human JNK1 was 0.00082 μ M. Capsules and tablets containing II were also formulated.

IT INDEXING IN PROGRESS

L72 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:467712 HCAPLUS

TITLE: Methods and compositions for drug loading in liposomes by transmembrane pH gradient

INVENTOR(S): Jensen, Gerard M.; Sullivan, Michele; Yang, Stephanie; Hu, Ning

PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA

SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047801	A2	20040610	WO 2003-US37964	20031126

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-429122P P 20021126

AB A method for encapsulation of pharmaceutical agents (e.g., antineoplastic agents) in liposomes is provided, having preferably a high drug:lipid ratio. Liposomes can be made by a process that loads the drug by an active mechanism using a transmembrane pH gradient. Using this technique, trapping efficiencies approach 100%. Drug:lipid ratios employed are higher than for older traditional liposome preps., and the release rate of the drug from the liposomes is reduced. After loading, residual acid is quenched with a quenching agent that is base permeable at low temps. The residual acidity is thus reduced and chemical stability (e.g. against hydrolysis) is enhanced. The stability of both the liposome and the pharmaceutical agent is thus maintained, prior to administration. The pH gradient is, however, present when the liposome is administered in vivo because the quenching agent rapidly exits the liposome.

L72 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:467711 HCAPLUS
 TITLE: Method of drug loading in liposomes by transmembrane pH gradient
 INVENTOR(S): Sullivan, Michele; Yang, Stephanie; Hu, Ning; Jensen, Gerard M.
 PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA
 SOURCE: PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047800	A2	20040610	WO 2003-US37790	20031126
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-429122P P 20021126

AB A method for encapsulation of pharmaceutical agents (e.g., antineoplastic agents) in liposomes is provided, having preferably a high drug:lipid ratio. Liposomes can be made by a process that loads the drug by an active mechanism using a transmembrane pH gradient. Using this technique, trapping efficiencies approach 100%. Drug:lipid ratios employed are higher than for older traditional liposome preps., and the release rate of the drug from the liposomes is reduced. After loading, residual acid is quenched with a quenching agent that is base permeable at low temps. The residual acidity is thus reduced and chemical stability (e.g. against hydrolysis) is enhanced. The stability of both the liposome and the pharmaceutical agent is thus maintained, prior to administration. The pH gradient is, however, present when the liposome is administered in vivo because the quenching agent rapidly exits the liposome.

L72 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:452990 HCAPLUS
 DOCUMENT NUMBER: 141:1226
 TITLE: Lapachone compounds for the treatment of proliferative disorders, including cancer
 INVENTOR(S): Jiang, Zhiwei; Reddy, Dasharatha; Ackerman, Samuel K.;

Salvesen, June
 PATENT ASSIGNEE(S): Arqule, Inc., USA
 SOURCE: PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004045557	A2	20040603	WO 2003-US37219	20031118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2002-427283P P 20021118
 AB The invention provides lapachone analogs and derivs. as well as methods of use thereof. These compds. can be used in pharmaceutical compns. for the treatment or prevention of cell proliferation disorders. These compds. can also be used in the treatment or prevention of psoriasis or cancer or precancerous conditions. Compound preparation is included.

L72 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:101158 HCAPLUS
 DOCUMENT NUMBER: 140:146014
 TITLE: Preparation of 4-[[[(1-acylamino)cyclohexyl]carbonyl]amino]-1-phenylpiperidin-3-ones as cysteine protease inhibitors and processes for their preparation
 INVENTOR(S): Lee, Jong-Wook; Lee, Bong-Yong; Lee, Chun-Ho; Hur, Yun; Han, Tae-Dong; Ko, Hyun-Kyoung; Yun, Suk-Won; Shim, Jae-Young; Lim, Joong-In; Son, Moon-Ho; Yang, Jae-Sung; Kim, Mi-Kyung
 PATENT ASSIGNEE(S): Yuhan Corporation, S. Korea; Dong-A Pharmaceutical Co., Ltd.
 SOURCE: PCT Int. Appl., 158 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011457	A1	20040205	WO 2003-KR1502	20030726
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:

KR 2002-44164

A 20020726

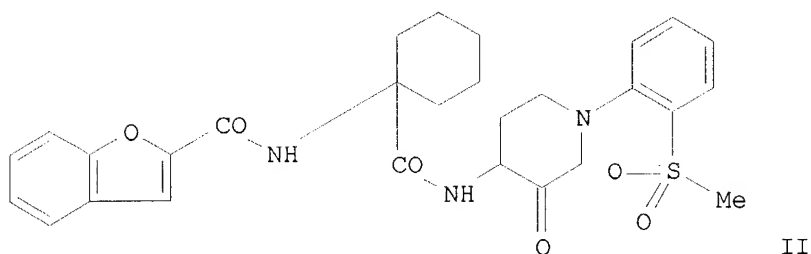
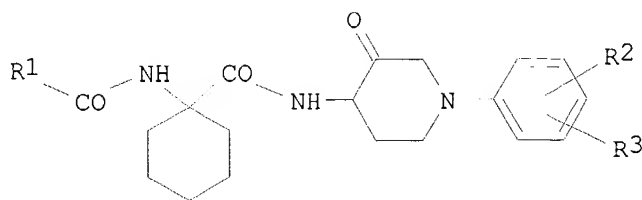
KR 2003-13889

A 20030306

OTHER SOURCE(S):

MARPAT 140:146014

GI



AB The present invention provides 1-phenylpiperidin-3-ones (shown as I; variables defined below; e.g. II) and pharmaceutically acceptable salts thereof, having cysteine protease inhibitory activity, pharmaceutical compns. containing the same as an active ingredient, and processes for the preparation thereof. For I: R1 is C1-6 alkyl (un)substituted with Ph, C1-6 alkoxy, or benzyloxy; C2-6 alkenyl (un)substituted with phenyl; C3-6 cycloalkyl; C1-5 alkoxy; Ph substituted with halogen, Ph, trifluoromethoxy, oxopyrrolidyl, mono- or di- C1-4 alkylamino or R4-C1-4-alkoxy (R4 is morpholine, pyrrolidine or piperidine); furanyl (un)substituted with ≥ 1 functional groups C1-6 alkyl, halogen, and oxopyrrolidyl; benzofuranyl (un)substituted with C1-6 alkyl or R4-C1-4 alkoxy; thiophenyl substituted with C1-6 alkyl or halogen; C1-6 alkylisoxazolyl; pyridyl (un)substituted with halogen; morpholinyl; benzothiophenyl; quinolinyl; pyrazinyl; benzyloxy; oxopyranyl; C1-6 alkyl-7H-imidazo[2,1-b]oxazolyl; C1-6 alkylchromon-2-yl; or (N-tert-butoxycarbonyl)piperidinyl. R2 and R3 are H; hydroxy; nitro; halogen; cyano; C1-6 alkyl (un)substituted with ≥ 1 halogen atoms; C1-5 alkoxy; C1-5 alkylthio; furyl; 1H-tetrazol-5-yl; oxazolyl; -C(O)R4; -S(O)nR6, -NR7R8 (R5 is H; hydroxy; C1-6 alkyl; C1-5 alkoxy; mono- or di-C1-6 alkylamino; or C3-6 cycloalkylamino; R6 is C1-6 alkyl; Ph (un)substituted with C1-4 alkoxy; benzyl (un)substituted with C1-4 alkoxy; R7 and R8 are H; C1-6 alkylcarbonyl (un)substituted with halogen, C1-4 alkoxy, or phenyl; C2-6 alkenylcarbonyl; C1-4 alkoxy carbonyl; C3-6 cycloalkylcarbonyl; benzoyl (un)substituted with ≥ 1 halogen atoms; mono- or di- C1-4 alkylcarbonyl; or C1-4 alkylsulfonyl, or bonded each ether to form a morpholine, azetidin-2-one, 3,3-dimethylazetidin-2-one, pyrrolidin-2-one, pyrrole, 2,5-dihydropyrrole, piperidin-2-one, oxazolidin-2-one, imidazolidin-2-one, imidazolidin-2,5-dione, tetrazole, 1,1-dioxoisothiazolidine, or C1-6 alkylaziridin-2-one ring; and n = 0-2). Methods of preparation are claimed and .apprx.190 example prepsns. are included. For example, II was prepared in 4 steps starting with amide formation from tert-Bu 4-amino-3-hydroxypiperidine-1-carboxylate and 1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexanecarboxylic acid to give 4-[N-[[1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]-1-(tert-butoxycarbonyl)-3-piperidinol followed by N-deprotection to give 4-[N-[[1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]-3-

piperidinol hydrochloride, followed by N-arylation with 2-fluorophenyl Me sulfone in the presence of K₂CO₃ to give 4-[N-[[1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]-1-(2-methylsulfonylphenyl)piperidin-3-ol, followed by oxidation by pyridine-SO₃ complex to give II. In some other N-arylations, in addition to the presence of a base, a Pd complex was used as catalyst. IC₅₀ values for inhibition of cathepsin K activity and selectivity for cathepsin K vs. other cathepsins (C, G, H, L, S) are tabulated for many examples of I; e.g. 8.17 nM for II for cathepsin K (382, >240, >240, 138, and 133 nM, resp., for others). The bioavailabilities of I by oral administrations, which were calculated after i.v. administrations of 10 mg/kg of rat, were .apprx.30-90 %.

IT 28322-92-1, Pyridine-SO₃ complex

RL: RGT (Reagent); RACT (Reactant or reagent)

(oxidizing agent for piperidinol; preparation of 4-[[[1-acylaminocyclohexyl]carbonyl]amino]-1-phenylpiperidin-3-ones as cysteine protease inhibitors and processes for their preparation)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:971727 HCAPLUS

DOCUMENT NUMBER: 140:16741

TITLE: Preparation of uracil derivatives as inhibitors of TNF- α converting enzyme (TACE) and matrix metalloproteinases

INVENTOR(S): Maduskuie, Thomas P.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 31 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

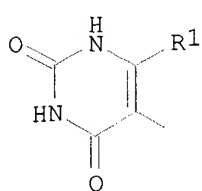
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

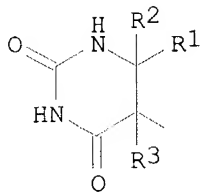
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003229081	A1	20031211	US 2003-389529	20030314
PRIORITY APPLN. INFO.:			US 2002-365334P P	20020318
OTHER SOURCE(S):	MARPAT 140:16741			

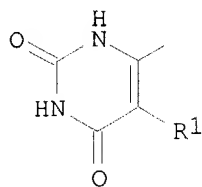
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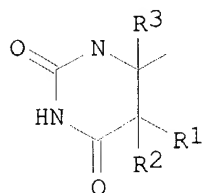
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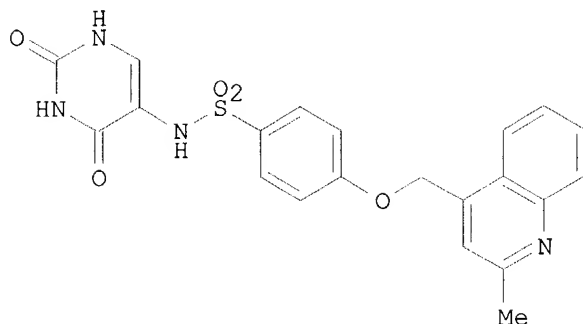
III



IV



V



VI

AB The title compds. A-W-U-X-Y-Z-Ua-Xa-Ya-Za [I; A = II-V; W = a bond, O, CO, CO₂, (un)substituted NH, etc.; X = a bond, alkylene, alkenylene, alkynylene; Y = a bond, O, (un)substituted NH, SOp, CO; Z = carbocycle, heterocycle; Ua = O, CO, OCO, CO₂, etc.; Xa = a bond, alkylene, alkenylene, alkynylene; Ya = a bond, O, CO, SOp, (un)substituted NH; Za = H, carbocycle, heterocycle; provided that U, Y, Z, Ua, Ya, and Za do not combine to form NN, NO, ON, OO, SOpO, OSOp, SOpSOp group; R1 = H, CF₃, alkyl, etc.; R2 = H, alkyl, alkenyl, alkynyl; R3 = H, alkyl, alkenyl, alkynyl; p = 0-2; with the provisos], useful as inhibitors of TNF- α converting enzyme (TACE), matrix metalloproteinases (MMP), aggrecanase or a combination thereof, were prepared E.g., a 3-step synthesis of VI.TFA (starting from 4-hydroxybenzenesulfonic acid sodium salt and 4-chloromethyl-2-methylquinoline), was given. A number of compds. I were found to exhibit Ki's of $\leq 10 \mu\text{M}$ in MMP assays. The pharmaceutical composition comprising the compound I is claimed.

IT 7719-09-7, Thionyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of uracil derivs. as inhibitors of TNF- α converting enzyme (TACE) and matrix metalloproteinases)

L72 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:931209 HCAPLUS

DOCUMENT NUMBER: 140:787

TITLE: Agitation process for the preparation and activation of drugs and other substances, and production means

INVENTOR(S): Whyte, Susan Kay

PATENT ASSIGNEE(S): Chemstop Pty Ltd, Australia

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097095	A1	20031127	WO 2003-AU607	20030520

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2002-2400 A 20020520
 AU 2002-2480 A 20020522

AB The invention discloses a process for the preparation and activation of a substance and a means for producing the activated substance. In particular, the invention discloses a method for treating a disease in a subject in need of such treatment, comprising administering a substance or active agent which comprises one or more components which have been agitated such that a harmonic of 20-50 Hz has been produced, in an amount effective to treat the disease, with the proviso that the disease is not an airway disorder.

IT 64902-72-3, GLEAN 74223-64-6, ALLY 79277-27-3,
 PINNACLE 79277-67-1, Thifensulfuron 79510-48-8
 , Metsulfuron 82097-50-5, Triasulfuron
 83055-99-6, LONDAX 86209-51-0, BEACON 94125-34-5
 , Prosulfuron 99283-01-9, Bensulfuron
 100784-20-1, SEMPRA 111353-84-5, Ethametsulfuron
 111991-09-4, Nicosulfuron 113036-87-6,
 Primisulfuron 120162-55-2, AZIMSULfuroN
 122931-48-0, Rimsulfuron 126535-15-7, UPBEET
 135397-30-7, Halosulfuron 135990-29-3,
 Triflusulfuron 141776-32-1, Sulfosulfuron
 144651-06-9, Oxasulfuron 144740-53-4,
 FLUPYRSULfuroN methyl

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (agitation process for preparation and activation of drugs and other substances, and production means)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:777532 HCAPLUS
 DOCUMENT NUMBER: 139:296920
 TITLE: Uracil derivatives as inhibitors of TNF- α
 converting enzyme (TACE) and matrix metalloproteinases
 INVENTOR(S): Maduskuie, Thomas P.
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
 SOURCE: PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003079986	A2	20031002	WO 2003-US8412	20030314
WO 2003079986	A3	20040513		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,

TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-365334P P 20020318

OTHER SOURCE(S): MARPAT 139:296920

AB The present application describes novel uracil derivs. of formula I:
A-W-U-X-Y-Z-Ua-Xa-Ya-Za or pharmaceutically acceptable salt or prodrug
forms thereof, wherein A, W, U, X, Y, Z, Ua, Xa, Ya, and Za are defined in
the present specification, which are useful as inhibitors of TNF- α
converting enzyme (TACE), matrix metalloproteinases (MMP), aggrecanase or
a combination thereof.

IT 7719-09-7, Thionyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
(uracil derivs. as inhibitors of TNF- α converting enzyme (TACE)
and matrix metalloproteinases)

L72 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:757676 HCAPLUS

DOCUMENT NUMBER: 139:276813

TITLE: Preparation of dihydroindol-2-ones as steroid hormone
nuclear receptor modulators for treatment of
congestive heart failure and other conditions

INVENTOR(S): Grese, Timothy Alan; Jadhav, Prabhakar Kondaji; Neel,
David Andrew; Steinberg, Mitchell Irvin; Lander, Peter
Ambrose

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

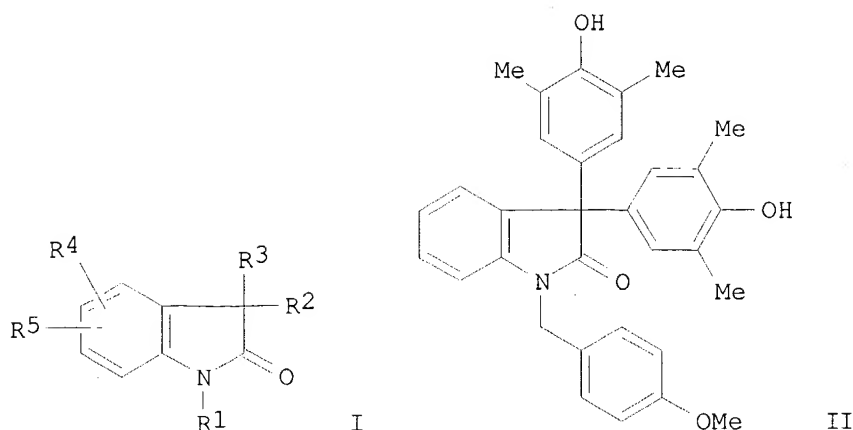
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003078394	A1	20030925	WO 2003-US6152	20030311
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2002-365212P P 20020315

OTHER SOURCE(S): MARPAT 139:276813

GI



AB Title compds. I [wherein R1 = (halo)alkyl, cycloalkoxy, (alkyl)cycloalkyl, alkyl(cyclo)alkoxy, alkenyl, alkynyl, CH₂CN, CH₂COR⁷, or (un)substituted (alkyl)aryl or (alkyl)heterocyclyl; R2 = (halo)alkyl, hydroxyalkyl, (alkyl)cycloalkyl, alkylalkoxy, alkenyl, or (un)substituted phenyl(alkyl); R3 = (un)substituted Ph; R4 and R5 = independently H, halo, OH, (cyclo)alkyl, alkoxy, CF₃, OCF₃, OCHF₂, CF₂CF₃, CN, NO₂, NH₂, NH-alkylamine, or N,N-dialkylamine; R⁷ = alkyl, cycloalkyl(amino), alkoxy, or (un)substituted aryl or heterocyclyl; and pharmaceutically acceptable salts thereof] were prepared as steroid hormone nuclear receptor modulators. For example, alkylation of 3,3-bis[4-(tert-butyldimethylsilanyloxy)-3,5-dimethylphenyl]-1,3-dihydroindol-2-one with 4-methoxybenzyl chloride in the presence of t-BuOK in THF, followed by deprotection using Bu₄NF in THF provided II (51%). The latter showed affinity for the human mineralocorticoid receptor (hMR) expressed in Sf9 insect cells with K_i ≤ 500 nM in competition expts. using [3H]-aldosterone as the specific ligand. In a whole cell binding assay using A549 human lung epithelial cells and [3H]-dexamethasone as the ligand, II also demonstrated modulation of glucocorticoid receptor (GR) activity with K_i ≤ 500 nM. Thus, I and their pharmaceutical compns. are useful for treating pathol. disorders susceptible to steroid hormone nuclear receptor modulation, particularly congestive heart failure.

IT 137-00-8, 2-(4-Methylthiazol-5-yl)ethanol

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indolones as glucocorticoid and mineralocorticoid receptor modulators for treatment of congestive heart failure and other conditions)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:472512 HCAPLUS

DOCUMENT NUMBER: 139:41838

TITLE: Sulfate salt of a **thiazolidinedione** derivative

INVENTOR(S): Craig, Andrew Simon; Ho, Tim Chien Ting

PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 WO 2003050114 A1 20030619 WO 2002-GB5674 20021213
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
 RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-29871 A 20011213
 AB A 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-
dione sulfate salt, a process for preparing such a salt, a
 pharmaceutical composition containing such a salt and the antidiabetic use of such
 a salt in medicine are disclosed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:454875 HCAPLUS
 DOCUMENT NUMBER: 139:38559
 TITLE: Coated particles, their manufacture and use
 INVENTOR(S): Anderson, David M.
 PATENT ASSIGNEE(S): Lyotropic Therapeutics, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 65 pp., Cont.-in-part of U.S.
 Ser. No. 297,997.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003108743	A1	20030612	US 2002-170237	20020613
US 6638621	B2	20031028		
US 6482517	B1	20021119	US 2000-297997	20000816

PRIORITY APPLN. INFO.: US 2000-297997 A2 20000816
 US 1997-58309P P 19970909
 WO 1998-US18639 W 19980908

AB A particle coated with a nonlamellar material such as a nonlamellar crystalline
 material, a nonlamellar amorphous material, or a nonlamellar semi-crystalline
 material includes an internal matrix core having ≥ 1 a
 nanostructured liquid phase or its dehydrated variant, or ≥ 1
 nanostructured liquid crystalline phase or its dehydrated variant, or a
 combination of the 2 is used for the delivery of active agents such as
 pharmaceuticals, nutrients, pesticides, etc. The coated particle can be
 fabricated by a variety of different techniques where the exterior coating
 is a nonlamellar material such as a nonlamellar crystalline material, a
 nonlamellar amorphous material, or a nonlamellar semi-crystalline material.
 IT **7783-06-4**, Hydrogen sulfide, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (coated particles for delivery or uptake of materials)

L72 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:154225 HCAPLUS
 DOCUMENT NUMBER: 138:210299
 TITLE: Mucoadhesive erodible drug delivery device for
 controlled administration of pharmaceuticals and other
 active compounds

INVENTOR(S): Moro, Daniel G.; Callahan, Howard; Nowotnik, David P.
 PATENT ASSIGNEE(S): Access Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003015748	A2	20030227	WO 2002-US26083	20020816
WO 2003015748	A3	20031204		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003044446	A1	20030306	US 2001-931319	20010816
US 6585997	B2	20030701		
EP 1418889	A2	20040519	EP 2002-761390	20020816
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRIORITY APPLN. INFO.: US 2001-931319 A 20010816				
WO 2002-US26083 W 20020816				

AB The present invention relates to a layered pharmaceutical delivery device for the administration of pharmaceuticals or other active compds. to mucosal surfaces. The device may also be used by itself without the incorporation of a therapeutic. The device of the present invention consists of a water-soluble adhesive layer, a non-adhesive, bioerodible backing layer and one or more pharmaceuticals if desired in either or both layers. Upon application, the device adheres to the mucosal surface, providing protection to the treatment site and localized drug delivery. The "Residence Time", the length of time the device remains on the mucosal surface before complete erosion, can be easily regulated by modifications of the backing layer.

IT **144-82-1**, Sulfamethizole
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (mucoadhesive erodible drug delivery device for controlled administration of pharmaceuticals and other active compds.)

L72 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:97928 HCAPLUS
 DOCUMENT NUMBER: 138:149370
 TITLE: Reversed micellar systems, and their use for gene delivery to parenchymal cells
 INVENTOR(S): Monahan, Sean D.; Wolff, Jon A.; Slattum, Paul M.; Hagstrom, James E.; Budker, Vladimir G.
 PATENT ASSIGNEE(S): Mirus Corp., USA
 SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. 6,429,200.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003027339	A1	20030206	US 2002-81461	20020221
US 6673612	B2	20040106		
US 6429200	B1	20020806	US 1999-354957	19990716
US 2004023393	A1	20040205	US 2003-627247	20030725
PRIORITY APPLN. INFO.:			US 1999-354957	A2 19990716
			US 1998-93227P	P 19980717
			US 2002-81461	A3 20020221

AB Disclosed herein are methods of preparing a gene delivery complex comprising solubilizing a nucleic acid into a reversed micelle with an internal water volume for delivery to parenchymal cells. Compds., such as polycations, which compact the nucleic acid can be added for easier delivery. Other mols., such as a surfactant having a disulfide bond, are used to interact with the nucleic acid-micelle complex to further enhance gene delivery.

IT **7791-25-5, Sulfuryl chloride**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reversed micellar systems, and their use for gene delivery to parenchymal cells)

L72 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:927430 HCAPLUS

DOCUMENT NUMBER: 138:14071

TITLE: Preparation of pyrido[1,2-c]pyrimidines as antibacterial agents effective against quinolone-resistant bacteria

INVENTOR(S): Ellsworth, Edmund Lee; Showalter, Howard Daniel
 Hollis; Hutchings, Kim Marie; Nguyen, Dai Quoc

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 168 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

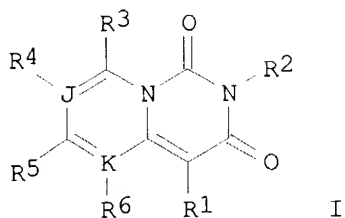
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096908	A1	20021205	WO 2002-IB1598	20020501
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1395585	A1	20040310	EP 2002-727861	20020501
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002010099	A	20040413	BR 2002-10099	20020501
US 2003114458	A1	20030619	US 2002-157370	20020529
PRIORITY APPLN. INFO.:			US 2001-294338P	P 20010530
			US 2002-365077P	P 20020319
			WO 2002-IB1598	W 20020501

OTHER SOURCE(S): MARPAT 138:14071

GI



AB The present invention provides pyrido[1,2-c]pyrimidines (shown as I; see below for variable definitions; e.g. 2-amino-6-[(R)-3-(1-aminocyclopropyl)pyrrolidin-1-yl]-4-cyclopropyl-7-fluoro-5-methylpyrido[1,2-c]pyrimidine-1,3-dione) and pharmaceutically acceptable salt thereof, that are useful as antibacterial agents. Also disclosed are pharmaceutical compns. comprising ≥ 1 I, process for preparing I, and intermediates useful for preparing I. Methods of preparation are claimed and .apprx.18 example preps. of I and intermediates are included. For example, 2-(4-chloro-5-fluoro-3-methyl-2-pyridinyl)cyclopropylacetone was reacted with **sulfuric** and acetic acids at 100° for 2 h to give the acetamide, which was reacted with triphosgene and KOtBu in CH₂Cl₂ to give 6-chloro-4-cyclopropyl-7-fluoro-5-methylpyrido[1,2-c]pyrimidine-1,3-dione, which was reacted with NaH in THF/DMF followed by 2,4-dinitrophenylhydroxylamine to give 2-amino-6-chloro-4-cyclopropyl-7-fluoro-5-methylpyrido[1,2-c]pyrimidine-1,3-dione, which was reacted with substituted pyrrolidines in DMSO at 60° for 5 h to give products such as [(R)-1-[(R)-1-(2-amino-4-cyclopropyl-7-fluoro-5-methyl-1,3-dioxo-2,3-dihydro-1H-pyrido[1,2-c]pyrimidin-6-yl)pyrrolidin-3-yl]ethyl]carbamic acid tert-Bu ester. R1 is H or optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, C3-C7 cycloalkyl, aryl, heterocyclic, or heteroaryl. R2 is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, C3-C7 cycloalkyl, aryl, heterocyclic, or heteroaryl, halo, NO₂, NO, CN, ORa, O₂C_{Ra} (Ra is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C3-C7 cycloalkyl, aryl, heteroaryl, heterocycloalkyl), CO₂Rb, CS₂Rb, C(O)Rb (Rb is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C3-C7 cycloalkyl, aryl, heteroaryl, heterocycloalkyl); C(O)NRcRd (Rc and Rd are independently H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C3-C7 cycloalkyl, aryl, heteroaryl, heterocycloalkyl); NReRf (Re and Rf are each independently H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, C3-C7 cycloalkyl, C5-C8 cycloalkenyl, aryl, heteroaryl, or heterocycloalkyl, or CO₂Rb, C(O)SRb, C(O)Rb, C(O)NRcRd; or Re and Rf are taken together with the N to which they are attached form a 4-8 membered ring having from 0 to 3 heteroatoms = N, O, and S, wherein said ring is optionally substituted by ≥ 1 substituents). R3, R4, and R6 independently are H, OH, optionally substituted (O)_nC1-C7 alkyl, (O)_nC2-C7 alkenyl, or (O)_nC2-C7 alkynyl (n is 0 or 1), halo, NO₂, CN, NReRf; or R1 and R6 taken together with the atoms to which they are attached form a 5-8 membered ring having from 0 to 3 heteroatoms = N, O, and S, wherein said ring is optionally substituted by ≥ 1 substituents. R5 is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, ORa, O₂CRb, CO₂Rb, C(O)SRb, SRb, S(O)Rb, SO₂ORb, SO₂CF₃, C(O)Rb, C(O)NR₃Rd, halo, NO₂, CN, NReRf; aryl or fused aryl, heterocyclic or fused heterocyclic, heteroaryl or fused heteroaryl, bicyclic heterocyclic or spiro heterocyclic, wherein fused aryl, fused heterocyclic, fused heteroaryl, bicyclic heterocyclic, or spiro heterocyclic can be substituted; and wherein J and K independently are C or N, provided that when J or K is N, R4 or R6 is absent at that position. Seven I were tested against an assortment of Gram-neg. and Gram-pos. organisms using standard microtitration techniques and the results are compared to those for ciprofloxacin. The effects of two I on the activity of DNA gyrase were determined and compared to ciprofloxacin.

Four I were tested against an assortment of ciprofloxacin-resistant E. coli and S. aureus organisms. The I display Gram-neg. and Gram-pos. activity, show inhibition of bacterial DNA gyrase, demonstrate in vivo protective activity in mice and are not highly cytotoxic to mammalian cells indicating selectivity for bacteria.

L72 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:888746 HCAPLUS

DOCUMENT NUMBER: 138:4599

TITLE: Preparation of fused imidazolidine derivatives as inhibitors of cartilage matrix degradation

INVENTOR(S): Funabashi, Yasunori; Takizawa, Masayuki; Morimoto, Shinji; Notoya, Kohei

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 940 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092606	A1	20021121	WO 2002-JP4640	20020514
WO 2002092606	C1	20021219		

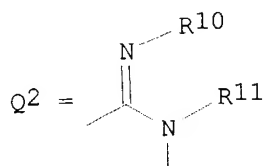
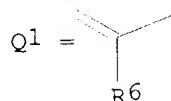
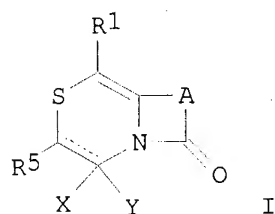
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2003034691 A2 20030207 JP 2002-139642 20020515

PRIORITY APPLN. INFO.: JP 2001-144608 A 20010515

OTHER SOURCE(S): MARPAT 138:4599

GI



AB The title compds. I [R1 = (S)nR2, etc.; n = 0 - 2; R2 = H, (un)substituted hydrocarbon, etc.; R5 = H, (un)substituted hydrocarbon, etc.; the moiety represented by II in I is Q1, etc.; R6 = H, (un)substituted hydrocarbon, etc.; A = Q2, etc.; R10 = H, ZR15, etc.; Z = SO2, etc.; R15 =

(un)substituted hydrocarbon, etc.; R11 = H, (un)substituted hydrocarbon] are prepared A process for preparing I is disclosed. Comps. of this invention in vitro at 0.1 μ M gave 20% to 55% inhibition of MMP-13 production Formulations are given.

IT 202289-38-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fused imidazolidine derivs. as inhibitors of cartilage matrix degradation)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:832560 HCAPLUS

DOCUMENT NUMBER: 137:333161

TITLE: Nociceptin analogs, their preparation, and their use in the treatment of pain

INVENTOR(S): Goehring, Richard R.; Chen, Zhengming; Kyle, Donald; Victory, Sam; Gharagozloo, Parviz; Whitehead, John

PATENT ASSIGNEE(S): Euro-Celtique, S.A., Luxembourg

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085291	A2	20021031	WO 2002-US12356	20020418
WO 2002085291	A3	20030220		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003013874 A1 20030116 US 2002-126507 20020418

EP 1379252 A2 20040114 EP 2002-731427 20020418

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2001-284674P P 20010418

US 2001-284676P P 20010418

WO 2002-US12356 W 20020418

OTHER SOURCE(S): MARPAT 137:333161

AB Piperidinybenzothiadiazine-2,2-dione derivs. and piperidinyquinolin-2-one derivs. are disclosed (preparation described) which have affinity for opioid receptors, including the ORL1 receptor. The compds. of the invention are useful for the treatment of acute or chronic pain.

IT 7803-58-9, Sulfamide

RL: RCT (Reactant); RACT (Reactant or reagent)
(piperidinybenzothiadiazines and piperidinyquinolinones, preparation, and use in treatment of pain)

L72 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:754351 HCAPLUS

DOCUMENT NUMBER: 137:273236

TITLE: Quinone compound cysteine protease inhibitors, and therapeutic use

INVENTOR(S): Arad, Dorit; Bollon, Arthur P.; Young, David G.; Peek, Andrew S.; Poland, Bradley W.; Shaw, Bailin; Vallurupalli, Jyothi
 PATENT ASSIGNEE(S): Exegenics Inc., USA
 SOURCE: PCT Int. Appl., 106 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076939	A2	20021003	WO 2002-US3785	20020205
WO 2002076939	A3	20031016		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-266412P P 20010205
 US 2001-271216P P 20010223

OTHER SOURCE(S): MARPAT 137:273236

AB Compds. having quinone and quinone analogs useful for pharmaceutical preps. have now been found which inhibit cysteine proteases, in particular, caspases and 3C cysteine proteases. The cysteine protease inhibitors of the invention can be identified by their mode of action in disrupting the ability of cysteine proteases and, in particular, caspases to cleave a peptide chain. These compds. are useful in inhibiting cysteine protease or cysteine protease-like proteins and for treating infectious diseases or physiopathol. diseases or disorders attributed to the presence of excessive or insufficient levels of cysteine proteases.

L72 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:332161 HCAPLUS

DOCUMENT NUMBER: 136:340538

TITLE: Production of sulphur-containing indirubin derivatives and their use in the treatment of cancer, cardiovascular and neurodegenerative diseases and viral infections

INVENTOR(S): Prien, Olaf; Steinmeyer, Andreas; Siemeister, Gerhard; Jautelat, Rolf

PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034717	A1	20020502	WO 2001-EP12007	20011017

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,

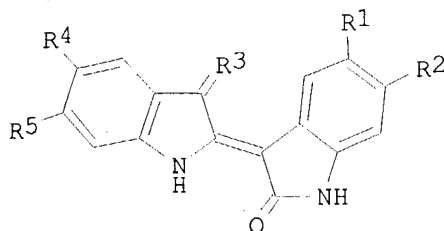
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10053474 A1 20020502 DE 2000-10053474 20001024
 AU 2002010548 A5 20020506 AU 2002-10548 20011017
 US 2002107404 A1 20020808 US 2001-983548 20011024

PRIORITY APPLN. INFO.:

DE 2000-10053474 A 20001024
 WO 2001-EP12007 W 20011017

OTHER SOURCE(S): MARPAT 136:340538
 GI



I

AB Sulfonyl indirubin derivs., e.g., I [R1, R2 = H, halogen, OH, NO, NO2, C1-10-oxaalkoxy, C1-18-haloalkyl, C1-18-hydroxyalkyl, C1-18-aminoalkyl, S(O)nR6, O-glycoside, N-glycoside; R3 = O, S, Se, Te, NOR7, NR9; R4, R5 = H, halogen, OH, NO, NO2, C1-10-oxaalkoxy, C1-18-haloalkyl, C1-18-hydroxyalkyl, C1-18-aminoalkyl, COM, CO2M, CH2CO2M, , O-glycoside, N-glycoside; R6 = H, halogen, OH, C1-18-aminoalkyl; R7 = H, C1-18-oxaalkyl, C2-18-oxaalkenyl, C1-18-oxacycloalkyl, C1-18-oxacycloalkenyl; R9 = H, CO2H, phosphoryl, sulfonate; n = 0 - 2; M = H, alkyl], their optical isomers and salts, the production thereof, the intermediates in the production thereof and the use thereof as a medicament for the treatment of cancer, such as concrete tumors and leukemias; auto-immune diseases, such as psoriasis, alopecia and multiple sclerosis; chemotherapeutically-induced alopecia and mucositis; are disclosed. Indirubin derivs. I and the use thereof as a medicament for the treatment of infectious diseases such as, for example, caused by uni-cellular parasites such as trypanosoma, toxoplasma or plasmodium, or nephrol. diseases caused by fungi such as, for example, cardiovascular diseases, such as stenoses, arteriosclerosis and restenoses glomerulonephritis; chronic neurodegenerative diseases such as Huntington's disease, amyotrophic lateral sclerosis, Parkinson's disease, AIDS dementia and Alzheimer's disease; acute neurodegenerative diseases such as cerebral ischemia and neurol. traumas and viral infections, such as for example cytomegalovirus infections, herpes, hepatitis B and C, and HIV diseases are also disclosed. Thus, I (R1 = SMe, R2 = R4 = R5 = H, R3 = O), was prepd. from 5(methylthio)-1H-indole-2,3-dione via condensation with indoxyl acetate in MeOH containing Na2CO3. The pharmacol. of I (R1 = SMe, R2 = R4 = R5 = H, R3 = O) was determined [IC50 = 0.3 µM vs. CDK2; IC50 = 0.5 µM vs. MCF-7 cells].

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:31225 HCAPLUS

DOCUMENT NUMBER: 136:90966

TITLE: Crosslinked high amylose starch for use in controlled-release pharmaceutical formulations and processes for its manufacture

INVENTOR(S): Lenaerts, Vincent; Beck, Roland Herwig Friedrich; Van Bogaert, Elsie; Chouinard, Francois; Hopcke, Reiner; Desevaux, Cyril
 PATENT ASSIGNEE(S): Can.
 SOURCE: PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002084	A1	20020110	WO 2001-US20319	20010626
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6607748	B1	20030819	US 2000-606399	20000629
EP 1305009	A1	20030502	EP 2001-950498	20010626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001012140	A	20031007	BR 2001-12140	20010626
JP 2004501957	T2	20040122	JP 2002-506706	20010626
NO 2002006254	A	20030227	NO 2002-6254	20021227
US 2004013726	A1	20040122	US 2003-619983	20030714
PRIORITY APPLN. INFO.: US 2000-606399 A 20000629				
WO 2001-US20319 W 20010626				

AB The present invention relates to a novel form of crosslinked high amylose starch and process for its manufacture. Such crosslinked high amylose starch is useful as an excipient in a controlled-release pharmaceutical formulation when compressed with a pharmaceutical agent(s) in a tablet. Such crosslinked high amylose starch is prepared by (a) crosslinking and chemical modification of high amylose starch, (b) gelatinization, and (c) drying to obtain a powder of said controlled release excipient. In a preferred embodiment, such crosslinked high amylose starch is prepared in following steps: (1) granular crosslinking and addnl. chemical modification (e.g., hydroxypropylation) of high- amylose starch; (2) thermal gelatinization of the starch from step (1); and (3) drying the starch from step (2) to yield a powder capable of being used as a controlled-release excipient. A crosslinked starch was prepared according to above method with moisture content of 4.5%, bulk d. of 150 g/L, packed d. of 210 g/L, pH of = 5.4, and particle size peak value of 50 μ m. A tablet contained tramadol hydrochloride 42.5, above starch 56.3, talc 1, and silica 0.2% in the core; and tramadol hydrochloride 21.25, above starch 57.55 talc 1, and xanthan gum 20% in the coating.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:730558 HCAPLUS
 DOCUMENT NUMBER: 135:278041
 TITLE: Antiviral therapeutic composition
 INVENTOR(S): Allen, Loyd V., Jr.; Benkendorfer, Travis T.
 PATENT ASSIGNEE(S): Viron Corporation, Switz.
 SOURCE: PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent

LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072312	A1	20011004	WO 2000-US35149	20001222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

US 2002009490	A1	20020124	US 2000-747827	20001222
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PRIORITY APPLN. INFO.: US 1999-171697P P 19991222

AB This invention discloses an antiviral therapeutic composition containing Viron, which can be used to treat human viral infections. A method of preparing sintered Viron tablets comprised blending the Viron powder, germanium sesquioxide, citric acid, sodium bicarbonate, polyethylene glycol and flavor together until uniform; placing tablet blend in a plastic blister mold, tamping the tablet blend gently, heating a plastic blister mold containing the tablet blend in an oven at 90° for 10-12 min for the sintering process to occur, removing the plastic blister mold from the oven, placing the plastic blister mold in a refrigerator for 5 min, dropping approx. 50 µL of a solution of the human α-interferon onto the formed tablet, and allowing the tablet to dry under gentle moving air.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:283784 HCAPLUS

DOCUMENT NUMBER: 134:305328

TITLE: Selective estrogen receptor modulators in the treatment or reduction of the risk of acquiring hypertension, cardiovascular diseases, and insulin resistance

INVENTOR(S): Labrie, Fernand; Marette, Andre

PATENT ASSIGNEE(S): Endorecherche, Inc., Can.

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

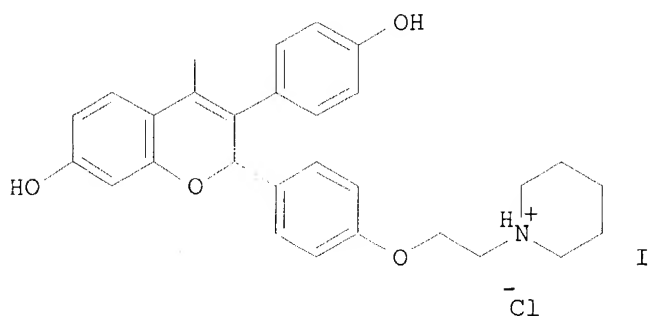
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001026651	A2	20010419	WO 2000-CA1222	20001013
WO 2001026651	A3	20011108		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1999-159359P P 19991014

OTHER SOURCE(S): MARPAT 134:305328

GI



AB Methods are provided for the medical treatment and/or inhibition of the development of hypertension, cardiovascular diseases, insulin resistance, and diabetes in susceptible warm-blooded animals, including humans, involving administration of a selective estrogen receptor modulator, e.g. EM-652.HCL (I).

L72 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:47237 HCAPLUS

DOCUMENT NUMBER: 135:277841

TITLE: Compatibility between sustained-release fine granules of nifedipine and other drugs (2)

AUTHOR(S): Yagi, Naomi; Sekikawa, Hitoshi; Ishikawa, Yoko; Saijo, Kazuyoku; Nishihana, Masaki; Katakura, Michihiro; Watanabe, Toshifumi; Itaya, Koichi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido, Tobetsu-cho, Ishikari-gun, Hokkaido, 061-0293, Japan

SOURCE: Byoin Yakugaku (2000), 26(6), 625-631

CODEN: BYYADW; ISSN: 0389-9098

PUBLISHER: Nippon Byoin Yakugakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB The compatibility of combining sustained-release fine granules of nifedipine (SRN) with 32 kinds of drugs was studied. The mixts. of SRN and drugs in heat-sealed packages (polyethylene-laminated glassine paper) were kept at either 20° and 75% relative humidity (R. H.) or 30° and 92% R. H. for 30 days, resp. Any changes in the color or weight of the samples were recovered. Dissoln. tests of nifedipine from the mixts. of SRN and drugs were studied in J.P. disintegration media Number 1 and Number 2. The dissoln. of nifedipine was slightly enhanced in mixts. containing sodium bicarbonate in the disintegration medium Number 1. However, no significant incompatibility was observed in the weight change, and no significant change was seen in the dissoln. of nifedipine.

IT 144-82-1, Urocydal

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compatibility between sustained-release fine granules of nifedipine and other drugs)

L72 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:456867 HCAPLUS

DOCUMENT NUMBER: 133:84284

TITLE: A combination of fructose-1,6-bisphosphatase (FBPase) inhibitors and insulin sensitizers for the treatment of diabetes

INVENTOR(S): Erion, Mark D.; Vanpoelje, Paul

PATENT ASSIGNEE(S): Metabasis Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 306 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038666	A2	20000706	WO 1999-US30713	19991222
WO 2000038666	A3	20011129		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1143955	A2	20011017	EP 1999-964313	19991222
EP 1143955	A3	20020828		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9917005	A	20020402	BR 1999-17005	19991222
JP 2003515523	T2	20030507	JP 2000-590620	19991222
AU 771039	B2	20040311	AU 2000-20583	19991222
RU 2227749	C2	20040427	RU 2001-120726	19991222
ZA 2001005016	A	20020919	ZA 2001-5016	20010619
NO 2001003115	A	20010824	NO 2001-3115	20010621
PRIORITY APPLN. INFO.:			US 1998-114718P	P 19981224
			WO 1999-US30713	W 19991222

OTHER SOURCE(S): MARPAT 133:84284

AB Pharmaceutical compns. containing an FBPase inhibitor and an insulin sensitizer are provided as well as methods for treating diabetes and diseases responding to increased glycemic control, an improvement in insulin sensitivity, a reduction in insulin levels, or an enhancement of insulin secretion.

IT 7719-09-7, Thionyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction; fructose-1,6-bisphosphatase inhibitor-insulin sensitizer combination for diabetes treatment, and inhibitor preparation)

L72 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:441571 HCAPLUS

DOCUMENT NUMBER: 133:57991

TITLE: Use of N-neohexyl- α -aspartyl-L-phenylalanine methyl ester as a flavor modifier

INVENTOR(S): Gerlat, Paula A.; Hatchwell, Leora C.; Walters, Gale C.; Miraglio, Angela; Sawyer, Harold A.

PATENT ASSIGNEE(S): The Nutrasweet Company, USA

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000036933	A1	20000629	WO 1999-US29851	19991217
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003008046 A1 20030109 US 1999-465837 19991217

PRIORITY APPLN. INFO.: US 1998-112948P P 19981218

AB This invention relates to the use of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-Me ester, or neotame, as a flavor (taste and/or aroma) modifier in foods, cosmetics and drugs, and compns. containing the same.

IT 137-00-8, Sulfurol

RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(use of N-neohexyl- α -aspartyl-L-phenylalanine Me ester as a flavor and aroma modifier)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:259972 HCAPLUS

DOCUMENT NUMBER: 132:293042

TITLE: Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles

INVENTOR(S): Van Lengerich, Bernhard H.

PATENT ASSIGNEE(S): General Mills, Inc., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021504	A1	20000420	WO 1999-US20905	19991006
W:		AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
RW:		GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
CA 2345815	AA	20000420	CA 1999-2345815	19991006
AU 9963872	A1	20000501	AU 1999-63872	19991006
EP 1119345	A1	20010801	EP 1999-951433	19991006
R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		
JP 2002527375	T2	20020827	JP 2000-575480	19991006

PRIORITY APPLN. INFO.: US 1998-103700P P 19981009

US 1998-109696P P 19981124

US 1999-233443 A 19990120

WO 1999-US20905 W 19991006

AB A liquid encapsulant component which contains an active, sensitive encapsulant, such as a live microorganism or an enzyme dissolved or dispersed in a liquid plasticizer is admixed with a plasticizable matrix material. The matrix material is plasticizable by the liquid plasticizer and the encapsulation of the active encapsulant is accomplished at a low

temperature and under low shear conditions. The active component is encapsulated and/or embedded in the plasticizable matrix component or material in a continuous process to produce discrete, solid particles. The liquid content of the liquid encapsulant component provides substantially all or completely all of the liquid plasticizer needed to plasticize the matrix component to obtain a formable, extrudable, cuttable, mixture or dough. Removal of liquid plasticizer prior to extrusion is not needed to adjust the viscosity of the mixture for formability. Release of an active component from the matrix may be delayed or controlled over time so that the active component is delivered when and where it is needed to perform its intended function. Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant.

IT **144-82-1**, Sulfamethizole

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(encapsulation of sensitive liquid components into matrix to obtain discrete shelf-stable particles)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:766507 HCAPLUS

DOCUMENT NUMBER: 130:29221

TITLE: Preparation of solid porous matrixes for pharmaceutical uses

INVENTOR(S): Unger, Evan C.

PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA

SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851282	A1	19981119	WO 1998-US9570	19980512
W: AU, BR, CA, CN, JP, KR, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 2002039594	A1	20020404	US 1998-75477	19980511
AU 9873787	A1	19981208	AU 1998-73787	19980512
EP 983060	A1	20000308	EP 1998-921109	19980512
R: DE, FR, GB, IT, NL				
US 2001018072	A1	20010830	US 2001-828762	20010409
US 2004091541	A1	20040513	US 2003-622027	20030716
PRIORITY APPLN. INFO.:			US 1997-46379P	P 19970513
			US 1998-75477	A 19980511
			WO 1998-US9570	W 19980512
			US 2001-828762	B1 20010409

AB A solid porous matrix formed from a surfactant, a solvent, and a bioactive agent is described. Thus, amphotericin nanoparticles were prepared by using ZrO₂ beads and a surfactant. The mixture was milled for 24 h.

IT **421-83-0**, Trifluoromethanesulfonyl chloride **2551-62-4**,
Sulfur hexafluoride **5714-22-7**, **Sulfur** fluoride
(S2F10)

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of solid porous matrixes for pharmaceutical uses)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:293427 HCAPLUS
 DOCUMENT NUMBER: 129:8597
 TITLE: Embedding and encapsulation of controlled release particles
 INVENTOR(S): Van Lengerich, Bernhard H.
 PATENT ASSIGNEE(S): Van Lengerich, Bernhard H., USA
 SOURCE: PCT Int. Appl., 63 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9818610	A1	19980507	WO 1997-US18984	19971027
W: AU, CA, JP, NO, PL, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9749915	A1	19980522	AU 1997-49915	19971027
AU 744156	B2	20020214		
EP 935523	A1	19990818	EP 1997-912825	19971027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002511777	T2	20020416	JP 1998-520558	19971027
EP 1342548	A1	20030910	EP 2003-10031	19971027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NO 9902036	A	19990428	NO 1999-2036	19990428
PRIORITY APPLN. INFO.:				
			US 1996-29038P	P 19961028
			US 1997-52717P	P 19970716
			EP 1997-912825	A3 19971027
			WO 1997-US18984	W 19971027

AB Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant. A release-rate controlling component is incorporated into the matrix to control the rate of release of the encapsulant from the particles. The addnl. component may be a hydrophobic component or a high water binding capacity component for extending the release time. The plasticizable matrix material, such as starch, is admixed with at least one plasticizer, such as water, and at least one release-rate controlling component under low shear mixing conditions to plasticize the plasticizable material without substantially destroying the at least one plasticizable material and to obtain a substantially homogeneous plasticized mass. The plasticizer content is substantially reduced and the temperature of the plasticized mass is substantially reduced prior to admixing the plasticized mass with the encapsulant to avoid substantial destruction of the encapsulant and to obtain a formable, extrudable mixture. The mixture is extruded through a die without substantial or essentially no expansion and cut into discrete, relatively dense particles. Release properties may also be controlled by precoating the encapsulant and/or coating the extruded particles with a film-forming component. An example of encapsulation of acetylcysteine is given using starch, polyethylene, glycerol monostearate, and vegetable oil.

IT 144-82-1, Sulfamethizole

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (embedding and encapsulation of controlled release particles)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT